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MULTIPLE-WHEEL HEAVY GEAR LOAD PAVEMENT TESTS

Volume III

Part B

Presentation and Initial Analysis of Stress-Strain Deflection
and Vibratory Measurements

Data and Analysis

R. H. Ledbetter

J. L. Rice

U. S. Army Engineer Waterways Experiment Station

TECHNICAL REPORT NO. AFWL-TR-70-113, Vol IIIB

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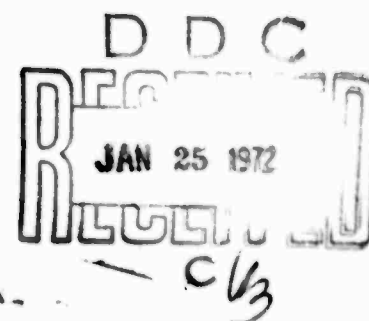
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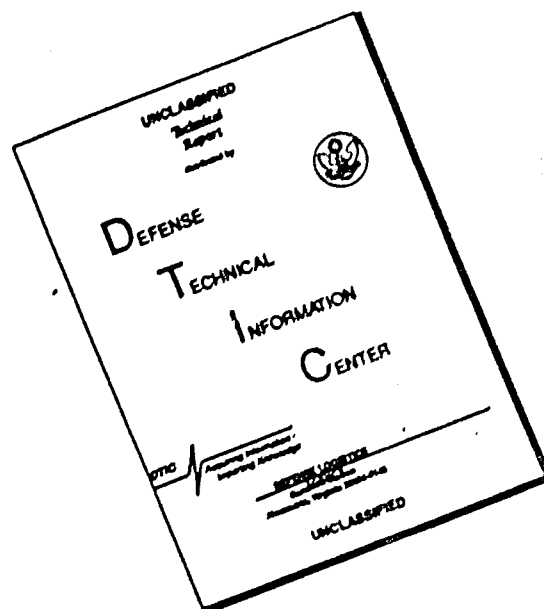
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Traffic tests						
Vibration measurement						

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MULTIPLE-WHEEL HEAVY GEAR LOAD PAVEMENT TESTS

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FOREWORD

This report was prepared by the U. S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi, under MIPR 68-7. The research was jointly sponsored by the U. S. Air Force under Program Element 64708F, Project 5224, Task 04; the U. S. Army under Task 02, Work Unit 002; and the Federal Aviation Administration under Engineering Requirement FAA-ER-450-034a.

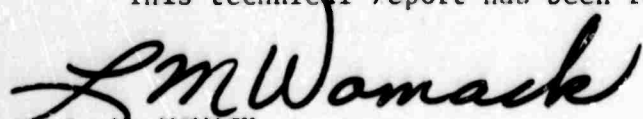
Inclusive dates of research were 1 January 1968 through 1 August 1971. The report was submitted 20 September 1971 by the Air Force Weapons Laboratory Project Officer, Mr. L. M. Womack (DEZ-M).

The investigation reported herein was conducted under the overall supervision of Messrs. W. J. Turnbull (retired), J. P. Sale, A. A. Maxwell (deceased), and R. G. Ahlvin, Soils Division, WES. Other Soils Division personnel actively engaged in this study were Messrs. D. N. Brown, C. D. Burns, A. H. Joseph, W. H. Larson, A. L. Mathews, H. H. Ulery, Jr., R. H. Ledbetter, D. L. Cooksey, and J. W. Hall, Jr. Personnel of the WES Instrumentation Services Division engaged in the study were Messrs. L. M. Duke, G. C. Downing, W. S. R. Beane IV, and J. L. Ferguson. Early in the test program, a special WES Flexible Pavement Branch, Soils Division, group was established for the purpose of collecting, reducing, analyzing, and reporting the instrumentation measurements. This group was under the direction of Mr. Ulery, with Mr. Ledbetter as project engineer. Other members of the group were Messrs. G. L. Tucker III, J. D. Mathews, D. P. Wolf, H. G. Brown, and M. J. Trawle.


Personnel of the Construction Engineering Research Laboratory actively engaged in the investigation were Messrs. J. J. Healy, R. L. Hutchinson, J. L. Rice, F. W. Kearney, and J. B. Gambill.

The flexible pavement instrumentation portions of this report were written by Messrs. Ulery and Ledbetter, the rigid pavement portions of this report were written by Messrs. Rice, Kearney, and Gambill, and Mr. J. W. Hall, Jr., prepared the section on nondestructive vibratory tests. Messrs. Ledbetter and Rice were the principal authors. Coordination between WES and CERL in preparation of the report was by Mr. Ulery.

This technical report has been reviewed and is approved.


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ABSTRACT

(Distribution Limitation Statement B)

Flexible and rigid pavement test sections were constructed and tested to gain information on pavement and soil behavior under large aircraft loadings. These test sections incorporated instrumentation systems designed to determine the response of the pavement structures to static, dynamic (slowly moving), and vibratory loads and to traffic by full prototype loadings. The components of the instrumentation systems, their installation, and the test programs are described in Volume III-A. This volume covers data reduction, analysis, and the findings of the instrumentation and vibratory testing programs; Appendixes A and B contain details of instrumentation measurements for flexible and rigid pavements, respectively. Analysis of the maximum response data from the instrumentation program resulted in the following findings for the flexible pavement test section:

- a. A load- and position-dependent moving zero reference level was identified for each deflection gage.
- b. Limiting maximum elastic deflection and vertical elastic stress versus depth curves were established for static load test results. Analysis showed that the same relationships were true for static and dynamic load tests, as well as for the speed tests.
- c. The soft layer in item 4 caused different stress and deflection distributions from those in item 3.

The major findings for the rigid pavement test section indicated that the Westergaard algorithm can be used for reasonable prediction of pavement response to single-wheel, twin-tandem, and 12-wheel-assembly loadings.

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CONVERSION FACTORS, BRITISH TO METRIC UNITS OF MEASUREMENT

British units of measurement used in this report can be converted to metric units as follows:

<u>Multiply</u>	<u>By</u>	<u>To Obtain</u>
inches	2.54	centimeters
feet	0.3048	meters
square inches	6.4516	square centimeters
cubic inches	16.3871	cubic centimeters
pounds	0.45359237	kilograms
kips	453.59237	kilograms
pounds per square inch	0.070307	kilograms per square centimeter
pounds per cubic foot	16.0185	kilograms per cubic meter
feet per second	0.3048	meters per second
miles per hour	1.609344	kilometers per hour
Fahrenheit degrees	5/9	Celsius or Kelvin degrees*

* To obtain Celsius (C) temperature readings from Fahrenheit (F) readings, use the following formula: $C = (5/9)(F - 32)$. To obtain Kelvin (K) readings, use: $K = (5/9)(F - 32) + 273.15$.

SECTION I

INTRODUCTION

1. PURPOSE

The purpose of this investigation was to validate present criteria, or establish new criteria, for the evaluation and design of both flexible and rigid airfield pavements to be subjected to multiple-wheel heavy gear loads (MWHGL).

2. BACKGROUND

The multiple-wheel gears of large, new aircraft (such as the C-5A and Boeing 747) may impose loads on pavements that are radically different from those previously encountered. Extensions to the existing criteria for pavement evaluation and design are necessary to evaluate the effects of these loads. Data are also required to determine the relative destructive effects of new and proposed aircraft on pavement performance. The Army, Air Force, and Federal Aviation Administration jointly sponsored this investigation. The investigation was conducted by the U. S. Army Engineer Waterways Experiment Station (WES), Vicksburg, Miss. Overall supervision of the tests and all details pertaining to the flexible pavement portion of the tests were provided by WES. The rigid pavement testing was directed by the U. S. Army Construction Engineering Research Laboratory, Champaign, Ill.

3. SCOPE

The purpose of this investigation was accomplished by the construction and testing of a specially designed test section consisting of both flexible and rigid pavements as described herein. Testing consisted of instrumentation measurements of deflection, strain, and stress resulting from applied static and dynamic (slowly moving) loads of multiple- and single-wheel gear assemblies; nondestructive vibratory testing to determine wave velocity and stiffness; and traffic testing with multiple- and single-wheel gear assemblies.

The MWHGL study represented such an extensive effort that the report of the study was divided into the following volumes:

- I - Basic Report (background, summary of entire study, conclusions, and recommendations)

II - Design, Construction and Behavior Under Traffic

III - Presentation and Initial Analysis of Stress-Strain-Deflection and Vibratory Measurements

A. Instrumentation

B. Data and Analysis

IV - Analysis of Behavior Under Traffic

The authors felt that the subject matter of Volume III was too broad to be presented in a single report. Therefore, Volume III-A mainly described the instrumentation system and its installation and operation to collect the data required to determine the stress, strain, and deflections under various static and dynamic loads and wheel configurations, temperature and pore pressure effects, and soil behavior patterns. Volume III-A also included descriptions of the preliminary test program conducted to evaluate the performance of the system and the test procedures and application of loads for the major test program. This report, Volume III-B, describes the major test program and the interpretation and analysis of instrumentation data collected during static and dynamic load tests: stress, consolidation, deflection, pore pressure, temperature effects, and pavement strain. This report also describes the results of the tests to determine the effects of the speed of the vehicle during the dynamic load tests, as well as analysis of the soil behavior patterns.

SECTION II

FLEXIBLE PAVEMENT TEST PROGRAMS

1. INSTRUMENTATION

Static and dynamic load tests were made on the flexible pavement test section and the response of the pavement-soil system was monitored by a complex instrumentation installation. The test section and the instrumentation system are described in detail in Volume III-A. The related equipment necessary to operate and accurately monitor the instrumentation system is also described in Volume III-A.

A total of 52 cells and gages were installed in items 3 and 4 in order to obtain adequate measurements of stress, strain, and deflection. The primary measurements to be obtained at various depths within the pavement structure were vertical stress and vertical deflection. Supplementary information to be obtained was pore pressures, strain in the bottom of the pavement wearing course, and temperatures of the asphaltic concrete pavement. Most of the instrumentation was installed in duplicate to increase the probability that measurements could be obtained regardless of the failure of a gage or cell.

Vertical normal stresses were measured by 17 WES-designed soil pressure cells and by three commercial soil pressure cells (for comparison as a cheaper substitute) at locations that duplicated installation of a WES cell. Two soil pore water pressure cells were installed to determine if pore pressure developed that would have to be subtracted from readings of the soil pressure cells to obtain the effective stress in the soil under load.

Vertical normal deflections were measured by 18 WES-designed deflection gages. Two full-depth reference rods for remote optical reading were installed within the instrumentation grid to monitor movement of the 12-ft-deep¹ reference plane in order to correct the response of the mechanical deflection gages.

Eight strain gages were placed at the bottom of the asphaltic concrete pavement and four thermistors were installed in the pavement.

¹A table of factors for converting British units of measurement to metric units is presented on page xxi.

Photoelectric cells were used to construct a tracking system that was found necessary for giving the location and position of a loaded assembly during dynamic load testing.

2. TESTING EQUIPMENT

Full-scale loads and wheel assemblies were used for conducting the static load, dynamic load, and traffic tests. Tests were conducted with one main 12-wheel landing gear of the C-5A Galaxy, a 6-wheel component of the main C-5A gear, a twin-tandem component of the Boeing 747 landing gear, and a single wheel. The tires used in all of the test carts were 49x17, 26-ply rating, which is the design tire for both the C-5A Galaxy and the Boeing 747.

3. PRELIMINARY TESTING PROGRAM

Prior to commencement of the major instrumentation testing program, a number of preliminary tests were performed to establish procedures to be followed in the test program. All of the preliminary tests except those for the tracking device were performed using the single-wheel 30,000-lb test cart, which was a C-5A tire mounted in a load vehicle. The 180,000-lb, 12-wheel assembly was used in developing and checking the tracking device. The preliminary tests are summarized below; details of the tests are given in Volume III-A.

Representative gages and cells at each depth were statically loaded and the response timed. The time lags for the static loading tests were determined to be a 2-min lapse after loading before recording deflection-gage response and a 30-sec lapse between loading and recording pressure cell response. The position-effects study showed that in order to achieve the best consistency possible for all static load tests, the loading point for each wheel configuration would have to be centered as accurately as possible over the gage and cell positions.

Data collected for study of soil response time-lag with depth and load-position effect were used in determining the performance of the instrumentation system. The system was shown to be functioning correctly, and the response of the system was considered to be consistent to an acceptable degree.

Movement of the reference rods monitored during static loading indicated that (a) the 12-ft-deep reference plane was within the zone of influence of

the tests loads; (b) load-induced movements were occurring at the selected reference depth; and (c) the optical monitoring system was adequate and accurate enough to measure these deflections.

Operation of the single-wheel test cart down the test section over the instrumentation at less than 1 mph and at 1, 3, and 6 mph indicated that all gages and cells were functioning properly in response to the dynamic loading.

Static load tests were conducted when the asphaltic concrete was relatively cool (26 C) and again when the pavement was considerably warmer (28-36 C). Also, the surface strain gages were monitored to determine the temperature-pavement strain effects. These tests did not show a temperature effect in the ranges of temperatures investigated.

4. MAJOR TESTING PROGRAM

a. Schedule of Tests

The major instrumentation testing program was conducted after the preliminary tests were completed and before traffic tests were initiated. Additional static and dynamic load tests were conducted during the traffic testing and after the completion of the 12-wheel traffic on items 3 and 4.

Table 1 shows the chronology of the test loadings. The static test loadings were always conducted first and the dynamic runs second, both with the same assembly at a given load and tire inflation pressure. A summary of the major instrumentation test program is shown in tables 2 and 3.

b. Test Procedures

The major instrumentation test program included static and dynamic loading tests. The static tests were conducted by moving a loaded test cart or an empty prime mover into position over the test section loading points and recording the responses of the appropriate cells and gages. In conjunction with each of the static load tests, the same test cart would travel slowly over the same instrumentation and the reactions of soil and pavement were recorded (dynamic load tests). In addition, speed tests were performed to study the effects of varied rates of loading and unloading of the pavement system. Instrumentation responses were monitored with the single-wheel assembly, 30,000-lb load, moving at speeds of 1 to 10 mph. Test procedures, summarized below, are described in detail in Volume III-A.

Table 1
MWHGL Static and Dynamic Instrumentation Loadings of
Flexible Pavement Test Section

Test Loading No.	Loading	Date Collection of Readings Completed	Static Loading Grid Pattern	Number of Static Readings
1	Preliminary tests	25 Apr 69	*	2,660
2	15 kips, 12 wheels, 45 psi	30 Apr 69	Partial	5,320
3	15 kips, SWL, 45 psi	6 June 69	Partial	2,660
4	30 kips, 12 wheels, 100 psi	19 June 69	Complete	5,360
5	30 kips, SWL, 100 psi	26 June 69	Complete	4,280
6	30 kips, 6 wheels, 100 psi	2 July 69	Partial	5,320
7	Prime mover (12 wheels)	9 July 69	*	1,660
8	30 kips, twin tandem, 100 psi	15 July 69	Complete	8,640
9	30 kips, twin tandem, 150 psi	18 July 69	Partial	2,760
10	Prime mover (twin tandem)	23 July 69	*	1,660
10a	30 kips, SWL, 100 psi (speed test)		--	
11**	6 kips, SWL, 10 psi	25 July 69	Partial	2,660
11a	30 kips, 12 wheel, 100 psi		*	
12	50 kips, SWL, 165 psi	30 Oct 69	Partial	2,660
13	60 kips, twin tandem, 225 psi	6 Nov 69	Partial	2,760
			Total	48,400

Note: Test loading Nos. 1-10 represent both static and dynamic load tests. Test No. 10a represents only dynamic loading, and test Nos. 11-13 represent only static loading.

* Selected locations.

** Performed in conjunction with another project.

Table 2
Summary of Tests with Load Cart

Assembly	Load Kips	Tire Infla- tion Pres- sure psi*	Prelimi- nary Tests	Test Loading No.**				
				Pretraffic Tests			During Traffic Static	Additional Static Tests
				Static	Dynamic	Speed		
12 wheel	180	45	--	2	2	--	--	--
	360	100	--	4	4	--	11a	--
6 wheel	180	100	--	6	6	--	--	--
Twin tandem	120	100	--	8	8	--	--	--
		150	--	9	9	--	--	--
	240	225	.	--	--	--	--	13
Single wheel	6	10	--	11	--	--	--	--
	15	45	--	3	3	--	--	--
	30	100	1	5	5	10a	--	--
	50	165	--	--	--	--	--	12

* Tire contact area for 120-kip twin-tandem load (tire pressure 150 psi) was 212 sq in. Tire contact area for all other test carts was 285 sq in.

** Test load numbers correspond with the numbers shown in table 1.

Table 3
Summary of Tests with Empty Prime Movers

Test Loading No.*	Prime Mover	Deadweight, lb	Tire Inflation Pressure, psi
7	6 and 12 wheel	2 front tires - 58,000	25
		2 rear tires - 44,000	24
10	Twin tandem pulled by a tractor	1 tire - 6,500	15
		1 tire - 5,900	15

* Test load numbers correspond with the numbers shown in table 1.

(1) Test assembly load points. The wheel configurations used were: 12 wheel, 6 wheel, twin tandem, and single wheel. Each configuration had its own distinct points of maximum loading, as shown in figure 1. These loading points were chosen as the points beneath which the maximum stress, strain, and, consequently, pore pressure would be induced in the pavement system being loaded. The load points were used in positioning the test cart for static tests and for positioning and traffic guidance during dynamic runs.

The maximum stress under the 12-wheel configuration migrated with depth from the surface under either of the back inside tires of the front 6 wheels, into the geometric center of the back axle of the front 6 wheels at depths of 2.5 to 12 ft, and then to the geometric center of the 12-wheel configuration at greater depths. For the 12-ft-deep pavement structure of the test section, point 1 under the center of the front axle and point 2 under either of the back inside tires represented the maximum load points. The 6-wheel configuration was the front 6 wheels of the 12-wheel configuration, and points 1 and 2 were the same as for the 12-wheel configuration.

For the twin-tandem wheel arrangement, the maximum stress was considered to migrate with depth from the surface under the left rear wheel to the geometric centroid of the configuration at depth. These two maximum load points were used as load points 1 and 2.

The point that gave the maximum stress path with depth for the single-wheel assembly was always directly beneath the geometric centroid of the tire.

(2) Instrumentation load patterns. Two main types of instrumentation loading patterns, static and dynamic, that were the same for both items 3 and 4, were designed and utilized in all of the instrumentation testing. The static loading patterns were further identified as complete, partial, and selected loading patterns. The complete pattern consisted of stopping the test cart on each location (X) in an item, shown in figures 2 and 3, and recording all of the instrumentation responses. The partial loading pattern consisted of stopping only on each location on the four instrumented rows in each item. The selected-location loading pattern was a modified partial loading pattern consisting of static loading only at selected or representative cells and gages in one or both items.

The dynamic loading pattern included collecting data from all instrumentation as the load cart traveled on each of the 23 rows shown in figure 4.

(3) Application of loads. Prior to each series of static load tests, all gages, cells, and reference rods were monitored to establish initial no-load responses. Pertinent ambient and pavement temperatures and barometric pressure readings were recorded. Similar no-load readings were made at the completion of a run on each static or dynamic load row, after any interruption of loading in excess of 30 min, and upon completion of each static load test.

Figures 2-4 show the locations of the instrumentation as well as the grid lines painted on the pavement of the test section to locate the static and dynamic rows.

The static load tests were conducted by starting on static row 1 in item 4 and successively loading each pavement loading point. The test cart then traveled in reverse back to the east maneuver area, and no-load readings were made for both items. The test cart returned down the same row to item 3 and stopped on the first position to be loaded. The loading procedure used in item 4 was followed in item 3, and the test cart returned to the east maneuver area traveling in reverse. Series of no-load readings were made for both items before the test cart was maneuvered into alignment with the next row to be loaded, which depended on the grid pattern being followed.

In order to determine the magnitude of the effect of the dead load of the prime movers on the soil response, static load tests were performed using the empty 12-wheel and twin-tandem prime movers. Measurements indicated that the truck used in the single-wheel assembly had a negligible effect on soil response, and no corrections were therefore necessary.

After each static load grid pattern, dynamic load tests were made with the same test cart. The test cart followed each of the dynamic rows from the east maneuver area across items 4 and 3 and then covered the same row in both items traveling in reverse. Dynamic tests were also made using empty 12-wheel and twin-tandem prime movers. Each dynamic test followed the full dynamic pattern of 23 rows; however, due to the load influence, only 21 rows were used for the single-wheel tests.

Dynamic speed tests were run only on the instrumented dynamic rows (5, 9, 11, and 15). The soil responses were monitored as the 30,000-lb single-wheel assembly traveled at each of the following speeds: 1, 2-3, 5-6, and 9-10 mph. These speeds were considered as very slow, normal traffic testing rate, twice normal, and fast, respectively.

Static load tests were conducted during and after traffic with the 12-wheel 360,000-lb assembly. Selected grid patterns were loaded with the same test cart after 438, 1718, and 2342 coverages in item 3 and after 447, 1727, and 2351 coverages in item 4. After traffic, static loading partial patterns were tested with a 50,000-lb single-wheel load and a 240,000-lb twin-tandem load. The loading procedure for each location was the same as the one established for the pretraffic static load tests.

(4) Monitoring soil instrumentation. Technicians read and recorded all instrumentation responses, temperature, and barometric pressure for each static load test. At the same time, the movement of the reference plane was monitored optically and recorded.

For all of the dynamic load tests, including the speed studies, monitoring of all of the instrumentation and tracking system was accomplished by oscillograph recorders. No-load and temperature readings were made and recorded directly on appropriate oscillograph records to serve as reference readings.

SECTION III

ANALYSIS OF DATA FOR FLEXIBLE PAVEMENT TESTS

Because of the great volume of both static and dynamic load test data obtained during the testing periods, only a very limited analysis of the data was complete at the time this report was prepared. Analysis of the maximum responses on the soil instrumentation in items 3 and 4 under both static and dynamic loadings was considered to be of primary importance and was undertaken first. These maximum responses are presented as depth versus maximum elastic deflection and maximum elastic stress curves. Interpretation and reduction of data for the development of the curves are given. Comparisons are made between soil response to static and dynamic loads and also between responses from the two instrumented items. The last presentation in this part is an analysis of the maximum responses and soil behavior patterns.

A portion of the actual instrumentation data was reduced and is presented in Appendix A along with evaluation of the consistency and reproducibility of the measuring instruments and the loss of instrumentation. The data are presented for both static and dynamic tests of the 30,000-lb-per-wheel loads, the static 50,000-lb single-wheel load, and the static 240,000-lb twin-tandem load.

The results of the maximum responses of the instrumentation are presented in figures 5-50. Figures 5-26 show deflections under both static and dynamic loads; figures 27-45 give stresses from both static and dynamic load testing; figures 46-48 show the results of speed tests; and figures 49 and 50 present pavement strain results. The actual data points used for developing each of the curves are shown on the curves. These data points represent averages of the responses of the gages or cells at each location. The accuracy and consistency of these points are discussed in Appendix A.

Figures 8, 15, 25, 29, 36, and 44 give summary comparisons of only the gear loads of primary interest: the single wheel, a 12-wheel component of the C-5A landing gear, and one twin-tandem component of the Boeing 747. The single-wheel and 12-wheel curves are for the 30,000-lb-per-wheel load; however, the twin-tandem curve is for 42,000 lb per wheel (the actual design wheel load of the Boeing 747). Finally, figures 51-62 show the results of

an analysis of the soil behavior patterns exhibited in the MWHGL test section.

1. ANALYSIS OF LOAD-POSITION EFFECTS

Probably the most important result of the position-effects study (discussed in detail in Volume III-A) was the behavior of the soil as registered by the deflection gages after the center point of the loaded wheel passed over a gage. This study was based on static load tests conducted by moving the single-wheel test cart toward and away from a gage position. The results showed that the maximum registration occurred after the load wheel passed the center of the gage; the distance of the point from the gage center decreased with depth. Similar behavior was noted under dynamic load tests but to a much smaller degree.

The procedure of loading and reloading the gage point demonstrated that the behavior was not due to the load tire being unbalanced in load distribution, which would only cause the maximum load point to either lead or lag the centroid of the tire with respect to forward movement. For the regular tests, the closest offset distances were 1 ft, and tests showed that the deflections registered with the load at 1-ft offsets were not in the area of influence of soil response discussed above. Nevertheless, to complete the position-effects study, an analysis was made of the behavior and possible explanations are presented in the following paragraphs.

One possible explanation is that the effect or behavior of the gages could be due to a combination of eccentric loading on the gage reference plate and, more so, to lateral earth pressure acting on the gage housing. The gage housing is 9-1/8 in. high and 2-1/4 in. in diameter. As the load tire approached a gage, lateral earth pressure, in addition to vertical normal stress on the gage plate, was building up on the side of the housing facing the approaching load tire. Also, the vertical normal stress distribution across the gage plate from an offset load point was probably not a uniform distribution. The nonuniform stress distribution on the gage plate, which would be an eccentric loading, and the lateral pressures on the gage housing probably had a balancing effect on the gage and prevented the eccentric load on the plate from causing a maximum reading or response before the load tire was centered on the gage. When the static load was centered on the gage, the true maximum response would have occurred because, at this point, the vertical normal stress

acting on the gage plate should have been of uniform distribution, and the lateral forces acting on the gage housing should have been balanced in all directions around the housing. As the load tire moved off and away from the gage center at the statically loaded offsets, the stress distribution across the gage plate would have been nonuniform, again causing eccentric loading on the gage. Also, as the load moved away, the lateral force would have become unbalanced and built up on the opposite gage housing face from the approaching load. This shift of lateral forces could have caused a shadowing or arching action effect on the opposite face of the gage housing, and this action plus the eccentric loading could have produced an over or larger response of deflection.

Another explanation could be that the beam action of the pavement layer or plastic response of the pavement-soil system caused or contributed to the indicated behavior. Still another explanation could involve the changing reference level (which is discussed in detail in the following sections) as the load tire approached, was over, and passed a gage location.

The above explanations seem credible; however, the true explanation of the indicated behavior still remains an unknown.

This phenomenon, as stated in Volume III-A, occurred whether the load tire was moving in forward or reverse static offsets; this maximum response is not believed to have been the true response of the soil. The true maximum deflection is believed to have been the one that occurred when the load was centered over the gage and all forces on the gage were balanced. This is the deflection reading that was used for every deflection gage in the data analysis of maximum responses, and this is the main reason for having the load points accurately centered. The soil pressure cells did not show this effect; they peaked at zero offset (centered). This pressure cell response reinforces the above reasoning for the response of the deflection gages. The soil pressure cells do not show eccentric loading because the construction of the cells is such that pressures across the entire cell face are averaged.

2. RESIDUAL STRESSES AND CONSOLIDATION

The instrumentation of items 3 and 4 showed a buildup of stresses and consolidation occurring in the test items from the installation of the cells

and gages, during the test section construction, and during the main testing programs to 26 January 1970, 3 months after completion of traffic testing.

a. Residual Stresses

A history of the response of each pressure cell in both items was kept from the time of installation of the cells in 1968 until a final reading in January 1970 (figures 63 and 64). These histories represent the no-load stress readings taken either early in the morning or in the late afternoon, before or after either construction activity or test loads were applied. The readings were taken either daily or weekly during the construction phase of the project, each morning during the instrumentation testing program and traffic tests, and weekly or biweekly after the completion of all tests until January 1970. These stress histories for each cell were kept for the purposes of monitoring the behavior of the cells, to aid in the analysis of the stress induced under loadings, to give an indication when cells had failed or were approaching failure, and to help correct any reading that was recorded incorrectly. Raw indicator readings were used for the stress histories; these readings were converted into pounds of stress per square inch and were used to prepare the plots shown in figures 65 and 66. These figures include stress versus depth for theoretical overburden pressure, measured stress change during construction of the test section from the time of installation of the cells to the beginning of the test program, measured stress at the end of all tests including traffic, and measured stress on 26 January 1970 (3 months with no loads on the section). These plots show that the theoretical overburden curves for both items are approximately equal even though item 4 included a 3-ft layer of soft 2-CBR clay, but the stresses measured by the soil pressure cells show a difference in the stress distributions for the items.

(1) Item 3. Figure 65 shows that after construction of the item, the stresses registering on the soil pressure cells were approximately equal to the theoretical soil overburden pressure down to the 7.5-ft-depth pressure cells. No residual stresses due to the construction operations and compaction had built up in this area. At the 12-ft depth, the pressure cells did register stress increases of over 100 percent in excess of the theoretical overburden pressure. The construction operations and compaction apparently had created stress in the soil at this depth. This increase in measured pressure over theoretical pressure is believed to be due to stress concentration

due to arching action (reference 1). The stress concentration was caused by a highly rigid object (the pressure cell) placed in a plastic medium. As will be discussed later, this increased stress level at the 12-ft depth did not behave under loading tests as a true residual stress that had to be overcome before stresses were registered on the cells; rather, it behaved as a reference level from which induced stresses operated. In this respect, it is questionable as to whether the stress should be called a residual stress or not. This concept of stress reference level will be discussed later.

After the completion of the testing program and traffic, the stress concentrations had increased at all depths except at the 0.75-ft depth, which decreased (figure 65). A large stress release had occurred at the 0.75-ft-depth cells, which were between the base and subbase. This stress release is not fully understood or the reasons known. One possible explanation could be that arching occurred above the cell in the crushed stone causing a stress release. The difference between any two curves is the stress increase or decrease.

Some of the stresses measured for the 90-day period between the end of tests to the final reading with no loads on the test sections showed a slight trend toward a decrease in the stress concentration after the testing period but did not return to the before-test stress level. Here again, as for the 12-ft-depth cells after construction, the stress concentration levels on all cells did not behave as residual stresses but as new reference levels for induced stresses. The stress histories during the testing program period showed the changing of the stress reference levels for each cell.

(2) Item 4. Figure 66 shows that much the same behavior trend occurred in item 4 during construction as in item 3, with the exception of the 4.5-ft-depth cells at the top of the soft 2-CBR layer. The histories show a definite reduced stress at this depth. The reduced stress readings are believed to be caused by the presence of material below the cells that is less stiff than the material above the cells. As for item 3, with the above exception, the stresses measured after construction were approximately equal to the theoretical soil overburden pressure down to the 7.5-ft depth. The pressure cells at the 12-ft depth in item 4 showed a 100 percent increase in stress over the theoretical overburden pressure. This increase was believed to be caused by the same mechanism as that already discussed for item 3. The

behavior of the induced stresses from load tests was also the same as item 3, with the increased stress level acting as a reference level.

During the testing period, item 4 showed an increase in the stress concentrations except at the 12.0-ft depth, which showed a slight decrease. The difference between any two curves is the stress concentration increase due to the load tests and traffic.

The curve for the 90-day period from the end of all tests to the final reading shows that a slight increase may have occurred in the stress concentration levels after the testing period, except for the stress at the 0.75-ft depth, which decreased (as discussed for item 3) to the before-testing level. Again, as for item 3 and the 12-ft-depth cells, the stress concentration levels on all cells, whether increased or decreased, behaved as new reference levels of stress for the induced stresses. The stress histories for item 4 also show, for the testing program period, the changing reference stress levels for each cell.

b. Consolidation

(1) Field measurements. As for the stresses, histories of each deflection gage were kept from the time of installation of the gages in 1968 until January 1970. These histories, figures 67 and 68, are deflection readings taken at no-load conditions during construction, testing, and after completion of all tests. The readings were taken at the same time and on the same schedule as the stresses during construction, testing, and after completion of tests. The histories were kept for the same objectives in studying the behavior of the gages and soil strains as for the stress histories; i.e., to help analyze the test-loading deflection data, to determine if any gages displayed erratic behavior and were questionable as to reliability, and to make corrections for erratic or erroneous data. Data for figure 69 were taken from the deflection gage histories; the curve is the Taylor square-root-of-time fitting method of consolidation (reference 2) applied to the data from a deflection gage for the period from installation to the beginning of tests (construction period).

From the beginning of the installation of the deflection gages in both items 3 and 4 in the MWHGL test section, the deflection gages measured a continuous downward vertical movement during all periods of

construction and testing and from completion of testing through the readings taken in January 1970. The first deflection gages were installed on 30 August 1968, and measured deformations were still continuing at the time of this reporting.

(2) Laboratory tests. Laboratory consolidation tests were performed on two undisturbed soil samples from item 3. One sample was from the heavy clay subgrade at a depth of 2.75 ft. The other sample and the one considered herein was from the lean clay subgrade at a depth of 5.75 ft. Both samples were taken from the 4-CBR subgrades. The laboratory results and the calculations are given in figures 70-75.

The lean clay subgrade material was used in this analysis because the deflection gages showed that the movement occurring in the test section during the period from gage installation to the beginning of tests took place in the lower 4 ft of the pavement structure. This reasoning was based on the fact that all of the deflection gages at depths of 0 to 7.5 ft showed the same movement at any given time interval and all showed the same rate of movement. Because all of the deflection gages measured movement with respect to a plane at 12 ft and the first deflection gages were 4.5 ft above this plane, the movement must have occurred in the 4.5 ft of lean clay. This idea was also reinforced by the CBR strengths measured in this material. The design CBR of the lean clay was 4, which was on the wet side of the compaction curve with the material nearly saturated, but this strength was only achieved in the upper part of the lean clay subgrade. The in-place tests after construction (described in Volume II) showed the range of strengths given in table 4.

Table 4
In-Place CBR After Construction

Depth ft	CBR	Remarks
5.75	4.5	Top of lean clay
6.75	3.7	
7.75	3.9	Avg 2.2
8.75	1.8	
9.75	1.1	
10.75	1.9	
11.75	2.2	

The initial void ratio for the lean clay was calculated to be 0.630, and the final void ratio was 0.499 (figure 70). Pertinent laboratory information for the lean clay is given in figure 71. The initial water content was 22.5 percent, and the initial degree of saturation was 94.3 percent. The final water content was 18.4 percent, and the final degree of saturation was 99 percent.

The consolidation tests were run using the Taylor square-root-of-time fitting method, which allowed each consolidation test to be run through a series of eight loads in one day. Figure 72 is the Taylor plot for the load increment of 1/2 ton per sq ft. The coefficient of consolidation C_v , calculated for the 1/2-ton-per-sq-ft load because this load is approximately the overburden weight of the soil, was 0.277 sq in./min (figure 73).

The void ratio e versus log pressure P curve is shown in figure 74. This curve did not exhibit a sharp curvature, which is characteristic of a remolded material. Preconsolidation pressure was calculated to be 2.85 tons per sq ft, but in a strict or theoretical sense, this cannot be considered a true preconsolidation, even though the soil was placed and field compacted to the desired state. The e log P curve also gave an indication that the lean clay behaved as a sensitive soil, possibly due to the high degree of saturation, low strength, and pore pressure buildup.

The ultimate settlement or consolidation settlement Δh was calculated for two conditions by using the existing soil pressure at the 7.5-ft-depth deflection gages and the preconsolidation pressure. Using existing soil pressure, Δh equaled 3.08 in., and using preconsolidation pressure, Δh equaled 0.26 in. The actual ultimate settlement due to construction and overburden weight is believed to be between these two conditions and is probably close to the settlement predicted from the actual measured movements by the Taylor fit method, figure 69. An approximate ultimate settlement for this period would probably have been about 1.5 in. if no loadings had been applied to the test section. Settlement during this time period is believed to have occurred below the first deflection gage in the bottom 4 ft of weak lean clay. The calculated field rate of consolidation given in figure 75 is not a good estimate because the layer cannot drain or dissipate pore pressures as fast as the coefficient of consolidation allows. This may be due to the location of the water table, or there may be a more impermeable

layer of soil beneath the test section. A truer time rate is believed to have been the field rate, as shown in figure 69.

The laboratory tests showed that even though the soil was compacted during construction, it would continue to consolidate under the weight of the overburden. Due to the nature of the material and its characteristics as a remolded material, the ultimate settlement before testing started is believed to be best indicated by the actual field settlement data and the predicted curve in figure 69. The field data and prediction curve gave a 100-percent primary consolidation value of the ultimate settlement as approximately 1.11 in. and a predicted time for 100 percent primary consolidation as approximately 290 days. The time predicted for 100 percent primary consolidation was not allowed to elapse between construction and testing due to the time limits involved and the need to begin the load testing program of the project.

Laboratory tests were performed only on the undisturbed soil samples from item 3 because the deflection gage data from item 4 were the same as the data from item 3. The conclusions drawn for item 3, based on the laboratory results and the deflection gage histories, are believed to also be true for item 4 and can probably be applied or concluded for the non-instrumented items of the test section.

(3) Continuing field consolidation. Preliminary load tests were started on the test section on 7 April 1969 before the primary consolidation under the overburden weight was completed. The soil deformation histories for both items during the preliminary special tests before the regular scheduled tests show that, in general, consolidation continued at about the same rate on all gages except the surface gages and the shallow 0.75-ft-depth gages in item 4. The surface gage in each item registered a definite permanent movement or seating during the preliminary tests. The 0.75-ft-depth gages in item 3 showed no movement different from the other gages, but the 0.75-ft-depth gages in item 4 did show different movement. One showed a seating movement and the other showed a release or upward movement. These movements for the surface gages and shallow gages were not believed to be irregular behavior due to these regions being areas where initial movements were expected in the base and subbase attributed to tightening or compacting under the first loads. The other gages in the items show approximately the same movements at the same

rates for the remaining depths, which again pointed to continued consolidation in the bottom 4 ft of the weak lean clay.

During the first regular scheduled static and dynamic load tests, which were conducted with 15,000-lb loads per wheel, all soil deflection gage histories for each item show that the consolidation in the bottom of the test section had approximately stopped, completing primary consolidation. The histories show that in general, the gages in each item were reflecting the same movement with no excessive downward or upward movement at any one gage. Generally the deflection gages in item 3 that showed any movement, registered downward movement, possibly secondary consolidation, with the shallow gages showing the most movement during the load tests. All deflection gages in item 4 showed consistent behavior; the general trend was a release or slight upward movement. What appears to be slight erratic behavior of the gages in both items during this period of load tests will be discussed later under analysis of data. Item 4 deflection gage histories show a slightly more erratic behavior than item 3, and this difference will also be discussed later.

The next scheduled load tests, static and dynamic, were with loads of 30,000 lb per wheel. The deflection gage histories of both items for this period show that the heavy loads caused an induced consolidation. This induced consolidation under load is different from the previously discussed consolidation in the lean clay. All indications before the 30,000-lb load tests were that the consolidation was a constant amount in all layers and occurred in the bottom 4 ft of the lean clay subgrade. This occurred under the overburden weight and was not affected by the loads of 15,000 lb per wheel, whereas, the consolidations that occurred during the 30,000-lb load tests were induced by the heavy loads and occurred in different amounts in different layers. In other words, consolidation was induced in all layers at all depths, not just the bottom 4 ft. The soil deflection gage histories show approximately the same consolidations in similar layers of each item. These histories show a decrease in consolidation with depth, with the surface and 0.75-ft-depth gages showing the most consolidation or permanent movement, which indicated densifying of the subbase under the heavy loads and possibly small lateral movements or shear failures occurring in the gravelly sand. At the 2.75-ft depth, the gages showed less permanent movement or consolidation

than the shallower depths but greater than the deeper gages. The deflection gages at 4.5 and 7.5 ft in item 3 showed approximately the same consolidation in these layers, but in item 4, the 4.5-ft-depth gages showed a little more consolidation than the 7.5-ft-depth gages, which showed only a slight permanent movement. The 4.5- and 7.5-ft-depth gages in item 3 registered approximately the same movement as the 4.5-ft gages in item 4, but the 7.5-ft-depth gages in item 4 registered less movement than item 3. In this 30,000-lb-per-wheel load test period, item 4 deflection gages again showed slightly more erratic behavior than the gages in item 3.

For the period of traffic tests, which were conducted with the 360,000-lb 12-wheel assembly, the deflection gage histories again show the same behavior for items 3 and 4, but with item 4 showing more permanent deformation or consolidation. This again was induced consolidation in both items at all depths due to the heavy load. The histories of both items show that, during the first month of applied traffic in August 1969, the traffic caused either no permanent deformation or very slight deformation with a release or upward movement registered on a few gages. Towards the end of the first month of applied traffic, all soil deflection gages in both items began to show a downward, induced-consolidation trend that lasted throughout the remainder of applied traffic, which terminated 3 October 1969. This induced consolidation also occurred in all layers, at all depths, and in different amounts per layer. Item 4 experienced more induced consolidation than item 3 as registered on all gages. The surface and 0.75-ft-depth gages in both items registered large, sudden permanent deformations towards the end of August that did not decrease or stop until the first of September. The 0.75-ft-depth gage in each item, on the inside deflection gage row (static row 7, figure 4), registered two to three times the movement that was registered at the 0.75-ft depths on the outside deflection gage row (static row 11). The surface deflection gages were located on the inside soil pressure cell row (static row 5) in each item. These large permanent deformations in the middle of the traffic lane were evidenced by the visible rutting in the middle of the traffic lane. This rutting or depression was larger in the middle of the traffic lane than on the sides, as evidenced by visual observations and by registrations of the 0.75-ft-depth gages on the outside deflection gage row (static

row 11), which was within the traffic lane. The other deflection gages showed a decrease in consolidation with depth. The 2.75-ft-depth gages did not show the large, sudden permanent movements as the shallower gages but did show larger movements than the deeper gages. In both items, the 4.5-ft-depth gages showed more consolidation than the 7.5-ft-depth gages, with the ones in item 4 showing more than those in item 3. The 7.5-ft-depth gages also showed more consolidation in item 4 than item 3 but to a lesser degree than the 4.5-ft-depth gages. All deflection gage histories show a decrease in erratic behavior for both items during the applied traffic period.

After the end of applied traffic, the histories show that the consolidation continued in items 3 and 4 in lane 1, but was beginning to decrease in February 1970, 4 months after the termination of applied traffic. However, there has been activity on the test section items since the termination of traffic that may be the cause for the continued consolidation. Five days after the termination of traffic, static load selected pattern tests were run with the 360,000-lb 12-wheel test cart. At the end of October and the first of November 1969, static load partial pattern tests were run with a 50,000-lb single-wheel load and twin-tandem 240,000-lb load, which were the largest loads used. These static load tests induced another large, sudden permanent movement (consolidation) that registered on most of the deflection gages. A few shallow-depth gages showed a release or uplift (this behavior will be discussed later in analysis). These sudden changes and the continued consolidation can be seen on the deflection gage histories. Between the static load tests on 10 and 29 October 1969 and afterwards, the test section experienced a small amount of vehicle and construction equipment traffic. The items also underwent vibratory tests with the large WES mechanical vibrator. The small amounts of traffic are believed to have kept the consolidation continuing and, primarily, the vibratory tests to have induced consolidation. The deflection gage histories show that a few gages stopped registering movement in January 1970 and that all movement or consolidation decreased in February 1970. The histories also illustrate a marked decrease in erratic behavior, and after the last static load tests, the rates of consolidation at all depths tended to be about the same again as before any testing started. To enforce the evidence of consolidation, the pore pressure histories in figure 76 show that the pore pressures have been dissipating since the additional static load tests.

3. INTERPRETATION OF DEFLECTION DATA

a. Static Load Tests

The initial reduction of the static load deflection data is presented in the data tables in Appendix A. Induced movements for each load were calculated by taking the difference between the load data and the no-load conditions before and after the load tests. This yielded the data shown in values labeled total and rebound.

Previous work on soil behavior under prototype aircraft loadings indicated that residual strains and stresses would occur in the MWHGL test section under the load tests. If residual strain or locked-in deflections did occur under loading, the next load test would theoretically have to overcome these locked-in strains before measurable deflections would be registered. If deflections occurred under the next load, the residual strains from the previous loads or load would have to be added to these to obtain the total induced deflections. The above reasoning is the basis for running the light-load tests first and the heavy-load tests last.

The first step in analysis of data was to establish the zero reference of each deflection gage. This zero reference is the datum from which the gage is operating under load and is the reference from which all movements are to be taken and calculated. Logical considerations would point to either a horizontal reference datum with respect to time or a gently sloping reference with time. The horizontal reference would assume no permanent deformation or induced consolidation and would allow for residual strains induced under load in the soil. A gently sloping reference would allow for permanent deformation, induced consolidation, and residual strains to be induced under load.

An early consideration was to use the previously discussed deformation history that was kept for each gage as the reference datum from which each gage was operating. A line of best fit or a line encompassing all of the data would be established. This reference datum would represent the no-load conditions of the soil at the particular gage location, and it would be used by subtracting the load-induced responses of the gage from it in order to obtain the total deflection experienced by the gage. The value obtained from this procedure would assume that residual strains had occurred and were accounted for by the method. Total elastic deflection would be obtained, and the

permanent deformation would be taken care of by the sloping reference datum. Once the difference between the reference and the induced response was obtained, this value would then be multiplied by the gage calibration factor, discussed in Volume III-A, to convert it into inches of deflection. Residual strain could also be separated from this value of deflection. This procedure seemed reasonable and appeared to be satisfactory based on the deformation histories of the deflection gages for the 15,000-lb-per-wheel load tests. These histories showed the behavior of the deflection gages was consistent and appeared to yield an almost horizontal line with time, which would indicate very little, if any, induced consolidation or permanent deformation.

Upon conducting the 30,000-lb-per-wheel loads tests, the deformation histories showed a definite change in behavior (figures 67 and 68): more induced consolidation occurred than under the 15,000-lb-per-wheel load tests, and the gages appeared to be erratic. These deformation histories for the 30,000-lb-per-wheel load test period made the first consideration of a reference datum doubtful. A reference datum line was established from the gage histories for the 30,000-lb-per-wheel load tests; however, it yielded different, not comparable, amounts of deflections under duplicate load points and on duplicate gages. This clearly proved that a reference datum established from the above procedure was not operating in the measured soil behavior data and in the soil behavioral patterns.

Based on the above results, a rigorous analysis of the static load data was undertaken in order to find and analyze the trends and patterns exhibited by the soil-response data and to arrive at the best method for presenting the final results. This analysis yielded some very interesting results pertaining to the soil behavior of the MWHGL test section.

In this analysis the raw data taken under all static loads for both items were plotted. All deflection gage responses were plotted in the form of offset distances versus deflection for the gage depths. Four values were plotted at each offset for a gage: initial no-load reading, load reading, immediate final no-load reading, and a delayed (10 minutes to several days) no-load reading. The taking of these readings and the times were discussed under major testing program. These plots yielded four curves for a particular static load test on each gage. The curves were labeled load curve, elastic rebound curve, delayed elastic rebound curve, and initial no-load reference

curve. Figures 77 and 78 show plots that are typical examples for all deflection gages in both items. The particular curves shown are for item 3; figure 77 is for the 7.5-ft deflection gage and figure 78 is for the 0.75-ft gage. Both curves represent actual data taken on these gages under the 360,000-lb 12-wheel static load tests with tire inflation pressures of 100 psi and at load point 1 of the assembly. For both figures, the offset axis represents offsets perpendicular (north-south) to the direction of travel (east-west). As an example of constructing these plots, at any given offset distance before the load was moved into position, an initial no-load reading existed for the deflection gage. Upon moving the load into position and after waiting for stability to be reached, a load reading was taken. The load was moved off and a rebound reading was taken immediately; however, at some later time, 10 minutes, an hour, or several days (over a weekend), another final no-load reading was taken. These readings were then plotted at the offset position as initial no-load, load, rebound, and delayed rebound readings, respectively. For the next offset position to be loaded, the final no-load reading (the delayed reading) from the last offset position served as the initial no-load reading if only a short time had elapsed or if the reading had not changed (the gage readings did not change after the first delayed no-load reading), and the load and unload procedures were repeated for this offset. After plotting all offset readings for a gage, including zero offset, the four curves representing the soil behavior were then drawn.

Several interesting trends of soil behavior were apparent from this method of analysis. As can be seen in the example figures, the initial no-load reference, delayed elastic rebound, and elastic rebound curves follow the behavior of what is labeled as the load curve. This behavior is dramatically shown in figure 78. Also shown in figure 78, to a greater extent than figure 77, is the shift of the initial no-load reference. This occurs because it is actually the delayed elastic rebound curve shifted one unit of offset. The values on these curves, delayed rebound and initial, are the same; however, at one point a value represents a delayed final no-load reading, and at another point the same value represents an initial no-load reading.

Figure 78, which is for the 0.75-ft-depth gage, better illustrates the curves following the load curve because this is a shallow gage, and it consequently reflects the individual effects of each load tire from assembly

load point 1 perpendicular to the direction of travel (see figure 1). Figure 77, which is for the 7.5-ft-depth gage, illustrates that the individual effects of the various loaded tires are reduced with depth, and the maximum response is being attained at load point 1 where the effects of the various loaded tires are additive with depths. Another interesting phenomenon is the curve labeled delayed elastic rebound; it appears to be almost parallel to the immediate elastic rebound curve and approximately at a constant difference from the rebound curve. The data points shown on this delayed rebound curve represent readings delayed from around 10 minutes to several days. In other words, a point on this curve might represent a delayed reading of 15 minutes and a point at another offset might represent a 3-day delayed reading; however, the curve formed by these points is a constant amount different and parallel to the immediate elastic rebound curve. A delayed rebound occurred, within a few minutes, that remained constant and did not appear to be time dependent for more than a few minutes. This rebound reading remained constant for several days or even a week until another load was applied.

The difference between points on the initial no-load reference curve, or the delayed rebound curve, at different offset values is not believed to be residual strain or permanent deformation that occurred in the soil under load. As can be seen on these plots, there does appear to be a very small strain that is released when loading at the wide offsets. These plots show this at the 10- to 12-ft offsets by both the immediate elastic rebound and the delayed rebound values being less than the initial no-load values.

Also adding support to the belief that residual strain did not occur under load is the fact that for each deflection gage, the next static test, whether it was with a different assembly or load (lighter or heavier) or both, started operating from an initial no-load reference that was approximately the same as the last delayed reading for the previous test. This occurred even after several days of dynamic load testing between static load tests.

The erratic behavior observed on the deformation histories (figures 67 and 68), especially during the 30,000-lb-per-wheel test period, occurred mainly during the dynamic load tests. The reference level of the soil and a gage appeared to be a function of the distance from a gage (the row) at which testing stopped after a day of dynamic runs. In other words, if a dynamic load test stopped on a row representing a 4-ft south offset from a gage, a

certain reference level in the soil was established, which was lower than the initial reference level at which the dynamic runs started several rows further south. This reference level was similar to the behavior shown in figures 77 and 78, and it held whether several hours or days elapsed before the next test. Upon continuing the dynamic load tests the next morning or after a weekend, the reference level continued to go down for rows closer to the gage until the row upon which the particular gage was located was run. At this row the reference level for the gage reached its lowest point and the maximum deflection registered by the gage occurred. If dynamic load runs were stopped on this row for several hours or days, the reference level remained at a constant value as before. When dynamic load tests were resumed, these tests would be on rows going north away from the particular gage row, and the reference level would come up with the distance away from the gage. On the last dynamic row run, which would be the most northern row from the gage, the reference level would be back up to approximately the same value at which it started at the first most southern dynamic row. This value would also be approximately equal to the last delayed reading for the previous static load tests, and it would maintain its stability until the next static load tests were started, whether they were several days later or less.

Figures 77 and 78 show the responses of deflection gages on the outside gage row; therefore, these curves do not show the loaded assembly passing over the gage because this was the last static row upon which tests were conducted. The curves, as shown in these plots, drawn for the deflection gages on the inside gage row show the same behavior for the static load tests as that described above for dynamic load tests. Curves for these inside gages move upward after the maximum load points pass over the gages. (They came up in incremental moves, with respect to the offsets going north away from the gages, shown by both the immediate elastic and delayed rebound readings being less than the initial no-load values.) They were not allowed to move up completely due to the north-south static load offsets being a maximum of 4 ft after the gages were passed over.

The most interesting result from the previous discussions of the dynamic and static load tests was that a reference level for each deflection gage was following what is called the load curve from both static and dynamic load tests. This reference level represents a load- and position-dependent, movable reference from which a gage and the soil behavior were

operating. This reference level moves up and down with the offset from a gage. If the last static load test on a gage was at the maximum or zero offset, then the responses from the next tests with a different assembly, whether they were dynamic or static loadings, started operating from this reference level. Also, if the last static load test for a gage was at an offset, the reference level would have moved up from the zero offset level and would be the reference level at which the next series of tests started operating. The next series of tests would start on the most southern static row if static tests and on the most southern dynamic row if dynamic tests. The start of this next series of tests would cause further movement upward of the reference level for a few offset distances; then the reference level would start down. This behavior would occur whether the next tests were with lighter or heavier loads.

This moving reference level is not believed to be residual strains being built into the soil and then being released. If residual strains are assumed to be active in the soil and if they are corrected for by adding them to the load readings under symmetrical load points (assembly load point 2 for the 12- and 6-wheel assemblies), then duplicate deflections do not occur on the same deflection gage at a given depth, nor do they occur on the duplicate gage at that depth. When no residual strains are assumed and the soil behavior is assumed to be acting from the moving reference, duplicate deflections do occur on the same and duplicate gages at symmetrical assembly load points. Duplicate deflections also occur at duplicate gages under the single-wheel tests if the moving reference is used. As discussed previously, this moving reference level continues to rise at the start of another series of tests for a few offsets toward the gage before it starts downward. In other words, a peak occurs at the beginning of each test series, and the difference between these peaks represents the permanent deformation or induced consolidation caused by the last test series.

Based on the foregoing discussion and analysis of the soil behavior, the conclusion from this behavior must be that, for lack of better terms, the soil acted as a plastic and elastic mass (similar to putty), but not as a viscoelastic material. It was plastic to the extent of being stable at various levels to which it might be worked under loaded conditions without inducing appreciable residual strains; however, it exhibited elastic behavior at each of its changing levels of plasticity with the elastic behavior operating

from the varying level. Based on this conclusion and actual field behavior under the lighter loads, the sequence of running lighter loads first did not matter. They could have been run any time because no residual strains that would have to have been overcome were induced under the heavy loads.

Working under the hypothesis just stated, the fact is evident that at a given load point, the true total deflection, including permanent and elastic, cannot be determined because the rebound of the soil may be greater than the initial movement due to the changed reference level. This also implies that the true initial no-load reference point is not known due to the changed reference level; therefore, the only truly known point of reference is the rebound value, which defines the moving reference level, and consequently the only truly known measure of movement is the rebound.

Due to the large quantity of data as previously discussed, only an analysis of the maximum soil response has been made because of the time limit for this report. This analysis of maximum response is the soil response with depth under the assembly load points, and this will be presented in the following sections of this part. The maximum response results were based on the soil behavior analysis and hypothesis discussed in the preceding paragraphs. As can be seen from the hypothesis of soil behavior, only the elastic response of the soil could be determined. From the soil behavior curves drawn for each gage and loaded assembly, the maximum elastic response was determined and is the difference at a point between the load curve and the delayed elastic rebound curve. Therefore, the data presented in tables A2-A13 are the initially reduced data and are slightly different from the values used to develop the depth versus maximum elastic deflection curves. These tabulated data values of rebound do not include the delayed rebound. The delayed rebound at a point has to be determined at each gage depth from the offset versus deflection curves of the soil behavior.

The second step in the analysis of data was to establish the movements of the 12-ft-depth reference plane and consequently the corrections to be applied to all deflection gage responses under load. Correction curves were required for each load assembly. As discussed in Appendix A, the data obtained from the optical reference rod readings were not very accurate and had a large variability due to the methods that had to be employed in obtaining the data. A curve of best fit through the scattered data plotted as offset versus elastic

deflection was not felt to be adequate; therefore, several methods of analyzing the data to obtain a good correction curve were tried. Offset versus theoretical elastic deflection curves were drawn by using various modulus of elasticity values and assuming Poisson's ratio of 0.5. The shapes of the theoretical curves were hoped to be useful to establish curves through the data; however, comparisons with the curves from actual measurements at the 7.5-ft depths proved they could not be used. Many offset versus theoretical elastic deflection curves for the 12- or 6-wheel assembly effects at 7.5-ft depth can be fitted across the actual measured data curves (see figure 79).

The method finally arrived at and felt to be accurate and applicable will be described in the following paragraphs. Offset versus vertical elastic stress curves were drawn for all loads and assembly effects at the 7.5-ft depth; these were drawn using the actual measured vertical elastic stress as registered on the WES pressure cells at this depth. The vertical stress axis of each was normalized to a percent scale with the maximum stress at 100 percent. Next, the deflection axes of the offset versus elastic deflection data curves at a 7.5-ft depth for each load and assembly were normalized to a percent scale with the maximum deflection at 100 percent. If these normalized curves of stress and deflection are overlaid or plotted on top of each other for each load and assembly, the stress and deflection curves almost coincide. In other words, for a given loaded assembly, the normalized elastic stress curve is the same as the normalized elastic deflection curve. The above procedure makes no assumptions of soil properties and no theoretical assumptions. Applying the procedure to the 12-ft-depth plane is following the soil behavior patterns.

On the basis of normalized vertical elastic stress versus offset plots made from the WES pressure cell responses at the 12-ft depth under all loads and assemblies, the shapes of the offset versus elastic deflection correction curves for the loads and assemblies were obtained. For the 12-ft reference plane, the data obtained from the 6-wheel 180,000-lb static load test were the best obtained with the optical measuring system; therefore, the shape of the normalized curve of offset versus elastic deflection for the 6-wheel 180,000-lb load was forced at the maximum elastic deflection point. Thus the correction curve for the 6-wheel 180,000-lb static load tests was obtained. Curve shapes of all other loads and assemblies were forced at maximum elastic

deflection points determined from the ratio of their maximum elastic stress to the maximum elastic stress under the 6-wheel 180,000-lb tests; this was found to be true for the maximum elastic deflections and stresses at 7.5-ft depths. In other words, the ratio of maximum elastic deflection for two loads and/or assemblies was found to be equal to the ratio of the maximum elastic stresses of the same two loaded assemblies. This procedure for matching the curve shapes to the maximum elastic deflection points at 12 ft is also compatible with the soil behavior. The resultant correction curves established for each load and assembly by the foregoing procedures fell within the scatter of data for each. The fact that the actual data for each load and assembly fell around the curve for that load and assembly gives some validity and weight to the correction curves. These correction curves for all loads and assemblies are given in figure 80. These curves must be used to make corrections to all deflection gage responses by adding the 12-ft-depth reference plane movements to each gage response.

The third step in the analysis of data was to determine the separate effects in the soil of the prime movers and consequently to establish correction values to be subtracted from the load data. This was the purpose of performing tests with the empty prime movers, as described previously under major testing program. An analysis of the soil deflection data collected under the 12- and 6-wheel prime mover without the load carts yielded negligible amounts of elastic deflection, if any, for both items 3 and 4. Even though the dead loads were high (approximately 30,000 lb per wheel), the outrigger wheels were spaced wide enough apart and the tire inflation pressures were sufficiently low so that no corrections were needed.

The single-wheel load vehicle had a deadweight of only 6000 lb that had no measurable effects on the measured soil response. However, the dead load of the tw. -tandem prime mover did have effects that required correction of the test data. The dead loads were high and the outrigger wheels were closely spaced. An analysis of the elastic deflections produced by the twin-tandem prime mover yielded the corrections given in table 5 for each assembly load point and for both items 3 and 4. As can be seen, the deflections were greater in item 4, and only maximum load point corrections are listed. These

corrections must be subtracted for all assembly load data taken with the twin-tandem test cart in each item.

Table 5
Corrections Due to Prime Mover To Be Applied
to All Twin-Tandem Maximum Deflections
for MWHGL Flexible Pavement Tests

<u>Item</u> <u>No.</u>	<u>Depth</u> <u>ft</u>	<u>Correction</u> <u>Point 1</u> <u>in.</u>	<u>Correction</u> <u>Point 2</u> <u>in.</u>
3	0.00	0.002	0.003
	0.75	0.002	0.003
	2.75	0.002	0.002
	4.50	0.001	0.002
	7.50	0.001	0.001
	12.00	0.000	0.000
4	0.00	0.007	0.007
	0.75	0.007	0.007
	2.75	0.007	0.007
	4.50	0.004	0.004
	7.50	0.001	0.002
	12.00	0.001	0.001

Once the reference level for each deflection curve under each loaded assembly was established, the elastic deflections determined, the 12-ft-depth reference plane corrections made, and the prime mover effects corrected, then static load elastic deflection curves were drawn. Depth versus maximum elastic deflection curves were drawn for both load points 1 and 2 for each loaded assembly except for the single wheel, which had only one maximum load point. In the upper 2 to 3 ft of the pavement structure, load point 2 is the maximum elastic deflection curve, and beneath 2 to 3 ft, load point 1 is the maximum elastic deflection curve. The curves of load points 1 and 2 cross generally at about the 3-ft depth. From these two curves, what is labeled a limiting maximum elastic deflection curve can be drawn. It is formed by drawing a tangent between the upper portion of load point 2 curve and the lower portion of load point 1 curve; the tangent bridges the point where the

two curves cross. This limiting curve is then in three parts: load point 2 curve at shallow depths, the tangent at intermediate depths, and load point 1 curve at deeper depths. The limiting maximum elastic deflection curve represents the maximum values with depth that would ever occur at any point under the loaded assembly; in other words, elastic deflections at any point under the loaded assembly would be less than or equal to, never greater than, the limiting curve values. These three static load curves (load point 1, load point 2, and limiting curve) versus maximum elastic deflection are given for each load and assembly and for both items 3 and 4 in the next section.

In developing the depth versus maximum elastic deflection curves for item 3, the duplicate deflection gages had equivalent responses; therefore, the values used to draw the curves are averages of the responses at each depth. The consistency of these responses is discussed in Appendix A. However, a difference existed in the readings from the duplicate deflection gages in item 4, and the cause was undeterminable. The cause can possibly be attributed to something in the complete electrical system for the duplicate gage row. As will be discussed later, there was a difference in the stress and strain distributions of items 3 and 4. Item 4 experienced larger induced stresses and strains than item 3 due to the soft 2-CBR layer built into item 4. This soft layer is between the 4.5- and 7.5-ft depths; therefore, it mainly affected the stresses and strains above the 7.5-ft depth.

When the deflection data from duplicate gages in item 4 were plotted, a difference that increased with increase of load was apparent. This difference, as discussed in Appendix A, was of a constant amount at each duplicate deflection gage location for a given loaded assembly. The outside deflection gage row yielded results at the 7.5-ft-depth gage that were comparable with the duplicate gages at 7.5 ft in item 3 under each loaded assembly; the inside gage row of item 4 showed responses that were always greater. No method exists for determining which gage row in item 4 was in error. Based on the comparison at the 7.5-ft depth with item 3 and the 12-ft corrections being the same for both items, the outside deflection gage row of item 4 was assumed to have yielded the correct results, and these results are presented on the curves for item 4 in the next section of this part. The curves presented, as for item 3, represent the average of duplicate responses of the gages.

b. Dynamic Load Tests

Only one value is given in the data tables in Appendix A for the responses on each gage with the forward and reverse runs of the dynamic load tests. This value corresponds closely to the maximum elastic values determined for the static load tests, using the procedures discussed in the preceding paragraphs. Basically, the analysis of the dynamic load data was the same and has the same associated problems as the analysis of the static load data.

The first step in the analysis of dynamic load data was to establish the zero (no-load) references from which each deflection gage was responding. Behavior of the soil during dynamic loading was discussed previously with the static load behavior. Based on the behavior exhibited during the dynamic and static load tests and to be consistent with the analysis of the static load test data, a reference was chosen that would be comparable to the static load test data reference. The delayed rebound reference level was chosen for the static load tests, and, consequently, the reference level chosen for the dynamic load tests was after the test cart had passed over the gages in a dynamic run. This reference level represents the immediate elastic rebound value; however, the delayed rebound did not appear to be as large, if it existed at all, as that for the static load tests. The procedures for obtaining the data from oscillograph records is given in Appendix A.

Corrections were required for the effects of the twin-tandem prime mover during dynamic runs. The 12- and 6-wheel prime mover did not have an effect on the gages for the main instrumented rows. As determined from the static load tests, the single-wheel vehicle also had no effect. The effects of the twin-tandem prime mover were determined by the same procedure as for a loaded assembly and were subtracted from the total response.

Once the data were obtained from the oscillograph records and corrected if required, they were plotted in comparison with the static load test data without the 12-ft reference plane corrections. These comparisons showed that the dynamic load results were approximately the same as the static loadings; consequently, the corrections for movement of the referenced plane determined for the static load tests were applied to the dynamic load test results. Where the dynamic load curves were slightly different from those for

the static loads, the dynamic load curves were extended on down to the 12-ft depth keeping about the same difference as that at the 7.5-ft depth. The above comparison and procedure were followed after the limiting maximum elastic deflection curves were drawn for the assemblies of the dynamic load tests the same as for the static load tests discussed previously.

The dynamic load test results for item 4 showed the same difference between the duplicate deflection gage rows as discussed for the static load tests; therefore, the dynamic load test results on the outside deflection gage row in item 4 were used to develop the depth versus deflection curves. Depth versus maximum elastic deflection curves and limiting curves for all dynamic load tests are presented later. Direct comparisons with the static load curves are also presented. All curves presented, as for the static load tests, represent averages of responses on the gages; the consistency and reproducibility of the dynamic load tests are discussed in Appendix A.

4. DEFLECTION TEST RESULTS

a. Item 3

Maximum elastic deflections under static and dynamic loads in item 3 are presented in figures 5-11. Figure 5 gives the static load deflections with depth in item 3 at assembly load point 1 (see figure 1) for all loads and assemblies. Also given in this plot are the limiting curves for all assemblies, with the exception of the single wheel. The single wheel has only one load point, and it is always the maximum; therefore, the single-wheel-load curve is automatically a limiting curve. Assembly load point 2 static load deflection curves for item 3 are shown in figure 6. The curves for the single-wheel load (which does not have load point 2) are also shown but only for comparative purposes. As can be seen in these two figures for load points 1 and 2, the twin-tandem 120,000-lb-load curves show that the different tire inflation pressures were effective only at shallow depths and that the deflections under the 6-wheel 180,000-lb load were not much less than the deflections under the 12-wheel 360,000-lb load due to the large spacing between the two 6-wheel groups of the C-5A 12-wheel assembly (see figure 1). Also clearly shown are the effects of the large 240,000-lb twin-tandem load.

Figure 7 gives the curves of load points 1 and 2 together with the tangent between them, which forms the limiting curve, for each loaded assembly

in item 3 except the single wheel. This figure shows the comparisons of load point curves for each assembly. The horizontal scale of the plot is constant with the deflection axis variable. In other words, the curves for each loaded assembly have been spaced in such a way that a minimum of overlap would occur; the zero point of the deflection axis for each loaded assembly is different. Values along the deflection axis apply only to a particular loaded assembly; these values are the reference points for each assembly. Any values taken from these curves must be calculated from the reference point for the loaded assembly using the horizontal scale of the plot. These curves are presented in this combined form only to show the comparison between load points for each assembly; they are not used to obtain specific values. The curves are the same curves as presented in figures 5 and 6.

To summarize the previous figures for the loaded assemblies that were of primary interest to this study and to the sponsors, the limiting curves for the single wheel at 30,000 lb, the 12 wheels at 360,000 lb, and the twin tandem at 168,000 lb were replotted in figure 8 for item 3. The twin-tandem 168,000-lb-load curve is an interpolated curve for which the basis and procedures will be given later.

The next three figures (9-11) show the deflections measured during dynamic load tests in item 3: figure 9 shows assembly load point 1 and limiting curves; figure 10, assembly load point 2 with the single-wheel results shown for comparison; and figure 11 shows the comparisons of load point curves and the tangents for the limiting curve of each loaded assembly. No dynamic load tests were run with the single-wheel 50,000-lb load or the twin-tandem 240,000-lb load. The deflections at the 12-ft depth came from the static load tests, as discussed in analysis of data, and the basis for this will be presented later. Finally, no summarization is presented for the dynamic load test, as was done in figure 8 for the static load tests, because the dynamic load deflections were approximately equal to those for the static load tests. Figure 8, is therefore, true for both static and dynamic load deflections, as will be shown later.

b. Item 4

Figures 12-18 present maximum deflections for static and dynamic loads for item 4. Figures 12-14 are for static load deflections of load

point 1, load point 2, and comparisons of the load point curves, respectively. The limiting curves are also shown on these plots. Figure 15 summarizes the limiting curves for the loaded assemblies that were of primary interest: the single-wheel 30,000-lb load, 12-wheel 360,000-lb load, and the interpolated twin-tandem 168,000-lb load. Also shown is the location with depth of the soft 2-CBR layer in item 4. Figures 16-18 show the dynamic load deflections of load point 1, load point 2, and comparisons of the load point curves, respectively. The dynamic load test results were not summarized because they were approximately equal to the static load deflections.

c. Surface Deflection Basins

Figures 19-21 show the static load deflection basins measured by the surface deflection gages for both items under the 12-wheel 360,000-lb load, the single-wheel 30,000- and 50,000-lb loads, and the twin-tandem 120,000- and 240,000-lb loads. The deflection basins represent total deflections, so they could be compared to the optically measured surface deflection basins presented in Volume II. (The optical measurements could not be made with enough accuracy to distinguish between total and elastic deflections.) Optically measured basins are shown superimposed on these deflection gage curves, and, as can be seen, the optical system was not accurate enough to show the true shapes of the curves. These figures show the deflection basins both parallel and transverse to the direction of traffic. No surface instrument measurements were available for the single-wheel 50,000-lb load or the twin-tandem 240,000-lb load in item 4. These static load tests were run after traffic testing and, consequently, after the surface deflection gage in item 4 had become inoperable (discussed in Appendix A). An inconsistency between the optically measured basin and the deflection gage measured basin parallel to traffic for the twin-tandem 240,000-lb load is shown in figure 21. Examination of the data for both types of measurement revealed no explanation of the differences.

d. Comparison of Limiting Curves

(1) Static versus dynamic loading. Figures 22 and 23 show comparisons of static and dynamic maximum elastic deflection limiting curves for each item. These curves were plotted for comparative purposes only and are the actual curves presented previously but are plotted on a variable deflection axis for the purpose of getting all comparisons on one plot with a

minimum of overlap. If these curves are to be used for obtaining specific values, the reference value for each loaded assembly on the deflection axis must be used to calculate deflection values for the particular loaded assembly.

As can be seen in figure 22, the dynamic load deflections in item 3 are very close in agreement with the static load deflections below a depth of about 3 ft. This was the basis for extending the dynamic load deflection curves down to the 12-ft depth, as discussed under analysis of data. From the 7.5-ft depth up to the surface, the curves show the actual comparison as if the 12-ft reference plane movements were subtracted from both. If the 12-ft correction were to be subtracted, the complete curves would shift to the left a constant amount equal to the given deflection at 12 ft. Also noticed on these curves is the fact that all dynamic load deflection curves lie to the left of the static load curves. The reason for the dynamic and static load curves being in such good agreement is that maximum elastic deflections were used for their development.

Elastic deflections should not be dependent upon slow-speed load application; in other words, the speed of a slowly moving vehicle should not appreciably affect elastic deflections. Elastic deflection is not time dependent, whereas plastic deflection or deformation is time dependent. The difference in the curves could be accounted for by the static load elastic deflection including delayed rebound (discussed under analysis of data) and the dynamic load elastic deflection not including this delayed action. All speeds for the dynamic load test carts were approximately 2-3 mph.

Comparisons of static and dynamic load tests for item 4 are shown in figure 23, plotted the same way as for item 3. The previous discussion for item 3 also applies to these curves; however, the static and dynamic load data are not in as good an agreement as for item 3. This difference between the static and dynamic load curves in item 4 could be caused by the influence of the soft 2-CBR layer increasing the delayed action more than that in item 3. As in item 3, all dynamic load curves lie to the left of the static; the speed of the dynamic load test carts was the same as for item 3.

(2) Item 3 versus item 4. Figure 24 gives a comparison of limiting maximum elastic deflection curves for static loading of item 3 versus item 4. These comparisons are plotted on a variable deflection axis, the same as for

previous comparisons and for the same reasons. In figure 24 the soft 2-CBR layer in item 4 is delineated, and as can be seen, this soft layer greatly affects the strain distributions under all loaded assemblies in item 4. This effect, as shown, also increases with load increase, and the action of this soft layer can be seen to be mainly effective from the bottom of the layer (7.5 ft) upward, with the main difference between item curves occurring within the soft layer. Deflections at the 7.5-ft level are approximately equal in both items for the lighter loads, with the difference increasing with increase in load. This close agreement at the 7.5-ft depth for both items was the basis for assuming that the outside deflection gage row of item 4 was yielding correct results, as was discussed under analysis of data.

Figure 25 presents a summary of the static load limiting curves of primary interest: the single-wheel 30,000-lb load, 12-wheel 360,000-lb load, and the twin-tandem interpolated 168,000-lb load. This plot is not on a variable deflection axis. These curves are the exact data curves presented previously, except for the twin-tandem interpolated curve, but they are in proper perspective with respect to the deflection axis. Again, the effect of the soft layer is very evident.

Figure 26 gives the comparison of limiting maximum elastic deflection curves for dynamic load tests of item 3 versus item 4. These curves are presented in the same manner as the previous static load test comparisons with respect to a variable deflection axis and the soft layer of item 4 being delineated. As is evident from the previous comparisons of dynamic to static loading in each item and then comparisons of static load test results in item 3 to item 4, these curves show the exact same relationships as previously discussed for item 3 versus item 4 static load comparisons. The fact that these dynamic load curves for each item are also in close agreement at the 7.5-ft depth adds some confirmation to the assumption that the gages in the outside row in item 4 were registering correctly. A summary of the dynamic load curves of primary interest is not presented because it would be the same as that shown for static load tests in figure 25.

The conclusion from comparisons of static and dynamic load deflection curves of item 3 versus item 4 must be that each item has different soil strain distributions as a result of the soft 2-CBR layer in item 4. This soft layer appeared to have large elastic deflections; however,

it was deep enough that its action was not detrimental to the overlying pavement structure. It appears to be acting almost as a layer of springs beneath a semirigid structure.

5. INTERPRETATION OF STRESS DATA

a. Static Load Tests

The initial reduction of the static load vertical stress was as presented in the data tables in Appendix A. Induced stresses for each load were calculated by taking the difference between the load and the no-load conditions before and after the load tests. This resulted in the values of total and rebound listed in the data tables.

The same steps in analysis as those taken for the deflections had to be made: a zero or no-load reference and corrections for each pressure cell had to be determined. Initial analysis of the vertical stress data also had to begin with the determination of the reference datum from which each cell was operating under load. As can be seen from the stress histories in figures 63 and 64, the histories indicate a horizontal reference with time for each cell during the testing periods. The erratic behavior exhibited on these histories is believed to indicate residual stresses that are a function of the last offset position of the test assembly before the readings were taken; the behavior is similar to the varying reference levels discussed for the deflection gages. However, the long-time trend of the stress histories is a horizontal reference for each WES pressure cell. Based on the behavior shown on these plots, as previously discussed, the SA-E pressure cell data were not used or considered in the final analysis.

In order to verify the stress history indications, an analysis similar to that performed on the raw deflection data was conducted by plotting the raw stress data for each soil pressure cell in the form of offset versus stress. The stress was plotted in units of strain but could be changed directly to psi by the cell calibration factor. As was done for the deflection gages, four values were plotted at each offset for a cell: initial no-load reading, load reading, immediate final no-load reading, and a delayed reading. The soil pressure cells did not register a delayed change as the deflection gages did; therefore, the delayed readings were approximately the same as the immediate final no-load readings. These two readings did vary, but the variation was within, and is believed to be due to, the degree of resolution or

accuracy of the strain indicator. Also, the final no-load readings were approximately equal to the initial no-load readings varying around it by a small amount due to the reason given above for the delayed readings.

Figure 81 shows the stresses registered by a WES pressure cell at a 12-ft depth under the 12-wheel 360,000-lb load test for assembly load point 1. The slight variations of the initial and final no-load readings can be seen. A line of best fit through these values would slope down, but if the plot were continued on the other side of the assembly load point 1, the line would slope up. As in the deflection analysis, if a cell was the last load position for a loaded assembly, the initial values would increase with the start of the next series of tests. The difference between the initial values at an offset and at the centered position is believed to be due to residual stress. This residual stress increased for the shallow-depth cells; in other words, induced residual stress was most evident at the shallow-depth pressure cells and decreased with depth.

Residual stresses were active on the soil pressure cells and were induced and released depending on loading positions. If the residual stresses on the cells were not added to the initial readings, equivalent induced vertical stresses at symmetrical assembly load points and at duplicate pressure cell locations did not result. However, when residual stresses were added to the initial readings, equal vertical stresses were induced on duplicate pressure cells and at symmetrical assembly load points. This analysis of the data from soil pressure cells verified the indications of the stress histories, and a horizontal reference datum was established for each pressure cell and for each series of tests. For each series of tests, the values used to develop the maximum vertical elastic stress versus depth curves (presented later) were the differences between the horizontal reference datum for a particular cell and the load responses of that cell.

Three curves of stress versus depth were developed similar to the deflection curves discussed previously. For all but the single-wheel loads, a load point 1 curve, a load point 2 curve, and a maximum limiting curve were drawn. The physical meaning and relation of these three curves are the same as discussed previously for the deflection curves. These curves, as for the deflection curves, represent averages of responses on individual and duplicate cells. The data used for these curves were considered elastic stresses

because the active residual stresses were completely recoverable. Residual stresses have not been added to the data presented in Appendix A.

No corrections were required for the effects of the dead loads of the assembly prime movers. A study of the results of the static load data taken under the prime movers without the wheel assemblies showed that negligible changes did occur, but they were not within the resolution or accuracy of the strain indicator. Therefore, they must be considered random errors in the reading or monitoring of the pressure cells.

All of the above procedures were applicable to items 3 and 4. Item 4 did show different stress distributions than item 3 due to the soft layer in item 4; however, no discrepancies between cell rows existed as they did for the deflection gage rows.

b. Dynamic Load Tests

Only one value is given in the data tables for the responses on each pressure cell with the forward and reverse runs of the dynamic load tests. These values correspond closely to the maximum elastic stresses determined for the static load tests in the previous analysis. The analysis of the dynamic load tests with respect to initial no-load reference and corrections was basically the same as that for the static load tests. However, a study of the dynamic load test results of vertical stress indicated that residual stresses were not occurring under the dynamic loading, possibly because of the effect of the continuously moving load. To be consistent with the analyses of stresses resulting from static loads and deflections from the dynamic load tests, the reference datum for each pressure cell was taken as a horizontal line tangent to the cell's unload static trace. The data reduction procedures are given in Appendix A.

As for the static load tests, no corrections were necessary for the effects of the empty prime movers on the soil pressure cells of the dynamic test rows analyzed. For data from the outside dynamic rows, corrections for the empty prime movers would have to be made. No 12-ft-depth reference plane corrections are necessary for the pressure cell responses; however, pressure cells were located at this depth so that stress versus depth curves could be drawn to the 12-ft plane. Depth versus maximum vertical elastic stress curves and limiting curves for all dynamic load tests are presented in the next section. Direct comparisons with the static load stress curves are also made.

All dynamic load response curves represent averages of responses.

6. STRESS TEST RESULTS

a. Item 3

Maximum vertical elastic stresses and limiting curves for static and dynamic load tests of both items are given in figures 27-40. A single-wheel test cart has only one load point, and as for the deflections previously discussed, this load point produces the maximum limiting curve. Static load elastic stresses versus depth at assembly load point 1 for all loads and assemblies in item 3 are given in figure 27 along with the limiting curves, which were discussed in analysis of data. Figure 28 shows assembly load point 2 curves in item 3 with limiting curves; however, the single-wheel curves are also shown for comparative purposes. These two figures show the same relationship between the 6- and 12-wheel assemblies as did the previous deflection plots; i.e., the 6-wheel groups of the 12-wheel assembly are spaced in such a way that little stress effects of the two groups are additive. Also clearly shown are the large stresses under the twin-tandem 240,000-lb load.

Figure 29 gives, on a variable static stress axis similar to the variable deflection axes discussed previously, the comparisons of the curves of load points 1 and 2 and the limiting curve tangent for each load and assembly in item 3. The curves of primary interest are summarized for the static load stresses in figure 30. Presented are the limiting maximum elastic stress curves of the single-wheel 30,000-lb load, 12-wheel 360,000-lb load, and an interpolated twin-tandem 168,000-lb load. This twin-tandem curve was interpolated on a linear basis between the actual twin-tandem loads of 120,000 and 240,000 lb.

Dynamic load test results of vertical elastic stress in item 3 are presented in figures 31-33. The sequence of presentation on these figures is exactly the same as for the static load tests just discussed. No summarization of the curves of primary interest is given for the dynamic load tests because the stresses are approximately equal to the static load stresses, and figure 30 is representative of the dynamic load as well as the static load stresses. This fact will be established later.

b. Item 4

Figures 34-40 present static and dynamic load vertical elastic stresses in item 4. This series of figures is the same as those for item 3 just discussed. Figures 34-36 show the static load stresses at the assembly load points 1 and 2, respectively, as well as the limiting curves for each test load. Figure 37 summarizes the curves of primary interest for the static load vertical stresses in item 4 with the interpolated twin-tandem curve developed as described for item 3. Figures 38-40 present the dynamic load stresses at assembly load points and limiting curves for all assemblies. No summary for the dynamic load tests is presented because the stresses are approximately equal to the static load stresses.

c. Comparison of Limiting Curves

(1) Static versus dynamic loads. Figures 41 and 42 give the comparisons of limiting maximum elastic stress curves of static and dynamic load tests in items 3 and 4, respectively. These curves are plotted for comparative purposes only; they are the actual limiting curves presented previously but are plotted on a variable stress axis. The purpose for the variable stress axis is the same as for all other comparisons of either stress or deflection.

Figure 41 is the comparison of static and dynamic load stresses of item 3. As can be seen, the stresses are very close in agreement as were the deflections in this item. The discussion for the deflection comparisons also applies to these stress comparisons. Figure 42 gives limiting stresses for static and dynamic loads in item 4 presented in the same form as for item 3. As for item 3, these stresses are also in good agreement.

(2) Item 3 versus item 4. Figure 43 gives the comparison of static load limiting maximum elastic stress curves for item 3 versus item 4. The comparisons are plotted on a variable stress axis similar to all other comparisons. In this figure the soft 2-CBR layer in item 4 is delineated, and as can be seen, it influenced the stress distributions. This soft layer appears to have influenced the stress distributions more with increase of load and was effective for the full 12-ft depth of the test section.

A summary of the curves of primary interest for the static load stresses is shown in figure 44. These are the limiting curves for the

single-wheel 30,000-lb load, 12-wheel 360,000-lb load, and the interpolated twin-tandem 168,000-lb load for items 3 and 4. This is not a variable stress axis plot; therefore, the curves are in proper perspective. Also delineated is the soft layer of item 4, and the effect of this soft layer on the stress distributions can be seen. These are the exact curves presented previously.

Figure 45 gives the comparison of the dynamic load limiting maximum elastic stress curves for item 3 versus item 4. These curves are shown on a variable stress axis. The soft layer of item 4 is again delineated on this plot. These curves show exactly the same relationships as previously discussed for item 3 versus item 4 static load comparisons, as is evident from the static versus dynamic load comparisons. A summary of the dynamic load curves of primary interest is not presented because it would be the same as that shown for static load tests in figure 44.

These comparisons of item 3 versus item 4 for both static and dynamic load vertical elastic stresses show that the stress distributions of each of the items are different. This difference must be concluded to be due to the soft 2-CBR layer in item 4.

7. PORE PRESSURES AND TEMPERATURE EFFECTS

As stated earlier in this volume, pore pressures in the soil were not induced except the negligible pore pressures that developed under two maximum load tests: 50,000-lb single-wheel and 240,000-lb twin-tandem loads. Therefore, no analysis of pore pressures is made in this report. The fact that no pore pressures were induced under load was completely consistent with laboratory tests on the soil showing that the soil was not at 100 percent saturation. With no pore pressures developing, the soil pressure cell responses under load were the effective stresses induced in the soil.

A few load tests were conducted specifically at different temperatures of the air and pavement, but the temperature differential was not sufficient to cause measurable effects in the pavement structure. Therefore, no correlation between temperatures and pavement or soil behavior could be made.

8. INTERPRETATION OF PAVEMENT STRAIN DATA

Loss of the pavement strain gages and their consistency and reproducibility are discussed in Appendix A. Laboratory tests were not conducted with the strain gages prior to installation; therefore, the manufacturer's gage

calibration factor had to be used to reduce the small amount of data that was obtained. Only one gage appeared to be operating properly at the beginning of the tests, but it did not operate long. The best results of this gage are presented in the next section, and since both the magnitude of response and behavior of the gage are doubtful, no reliance should be placed on the presented curves.

The problem of establishing a reference from which each gage was operating existed with the analysis of the strain gage behavior as with the deflection gages and pressure cells. Both the initial no-load gage readings and the final no-load gage readings were so scattered that a definite operation reference level was almost impossible to determine. The final no-load readings appeared to give the best reference. Use of this reference gives the elastic strain in the pavement, and this approach is also consistent with the methods used to obtain the elastic values of deflection and stress for the soil.

Once the reference was established, the load readings were subtracted from it and the difference multiplied by the gage calibration factor, resulting in the elastic strain induced at the bottom of the pavement. The best results obtained (presented in the next section) were for static load tests of the 12-wheel assembly loaded to 360,000 lb with tire inflation pressures of 100 psi. These data are presented as curves of offset versus strain.

9. PAVEMENT STRAIN RESULTS

The results presented here were the best obtained and are included only to give an indication of the induced strains at the bottom of the asphaltic concrete pavement of the test section. These results are from one strain gage in item 4 that measured strains transverse (north-south) to the direction of travel. Also these strains are for static load tests; no strains are available for dynamic load tests.

The results are presented in figures 49, 50, and 82. Figure 82 shows temperatures at the bottom and top of the pavement versus strain for no-load conditions. These measurements were made for several days with no testing or equipment allowed on the section. As can be seen, the bottom pavement strains are a linear function of the pavement temperatures. Figure 49 shows offset strains at distances parallel to the direction of forward movement for assembly load point 2 of the 360,000-lb 12-wheel assembly. As can be seen, the

gage did respond to the different wheels in alignment with load point 2 (see figure 1). In figure 50, strain at offset distances from load point 1 of the same 12-wheel assembly are plotted. At the top of the figure are offsets perpendicular to forward movement versus strain for which the row numbers correspond to the row on which point 1 was located when the strain was measured (figure 3 should be used with figure 50). The plot at the bottom of figure 50 is for strains at offset distances parallel to the forward movement for assembly load point 1. This plot, as for figure 49, shows the effects of the different sets of wheels. In this plot and figure 49, the letters on the offset axis correspond to the grid in figure 3.

10. SPEED TEST RESULTS

Figures 46-48 give the results of the speed tests (discussed under major test program) of the single wheel at the 30,000-lb load. These speed tests were conducted at four speeds: slow, about 1-2 mph; normal, about 2-3 mph; twice normal, about 5-6 mph; and fast, about 9-10 mph. Figure 46 shows the results of the maximum elastic deflection versus depth for both items. As can be seen, the speeds had a negligible effect on results of tests, and these curves are the same as the dynamic load single-wheel curves for the 30,000-lb loads presented previously. Also, these curves add evidence to the discussion presented earlier for the dynamic load elastic deflections at slow speeds being approximately equal to the static load elastic deflections.

Figures 47 and 48 give the dynamic load elastic stress of the same speed tests for each item. These curves are also the same as the previously presented dynamic load elastic stress curves, and they show no effect of slow speeds on induced elastic stresses.

11. ANALYSIS OF SOIL BEHAVIOR PATTERNS

In this last part will be given the first results of an analysis of the soil behavior patterns exhibited by the previously presented static and dynamic load test curves. The curves and plots presented in this section come from the actual data shown on the previous plots. Figures 51-53 are the results of this analysis. Figure 51 shows the deformation or induced consolidation versus depth that occurred under only the traffic testing phase of the project in the 12-wheel traffic lane. These curves are presented for both instrumented items with two curves per item: one curve represents the inside

deflection gage row, and the other represents the outside deflection gage row (see figures 2 and 3). The deformation was calculated from the beginning to the end of the traffic tests, and figure 51 shows the amounts that occurred at each deflection gage with respect to the 12-ft reference plane (this is why the curves go to zero at the 12-ft depth and does not imply that consolidation did not occur below 12 ft). Consolidation in the various layers can be calculated by subtracting the amount of consolidation at one depth from the amount of consolidation at a lesser depth.

The upper part of these curves, above 2.75 ft, shows the same results as found in test pits opened after traffic tests (see Volume II). These curves show that the movement, rutting, and heaving shown on the surface of the test section occurred in the subbase material with very little movement at the top of the subgrade. This subbase movement was probably lateral movement or lateral shear failure. The inside deflection gage row curves show that more movement occurred in the center of the traffic lane than at the sides of the traffic lane, shown by curves for the outside gage row. This was also evident on the surface. The sides of the traffic lane were probably compensated by material moving out from the center and over under the sides. Also evident on this plot is the fact that item 4 experienced slightly more induced consolidation and at a faster rate than did item 3. The consolidation in item 4 appears to have been slightly greater in the soft layer.

Figures 52 and 53 show plots of the theoretical elastic deflections (see reference 3) as compared to the actual measured elastic deflections for the 12-wheel 360,000-lb static load tests for items 3 and 4, respectively. The theoretical elastic deflection curves were computed for a homogeneous, isotropic, linearly elastic half-space with Poisson's ratio of 0.5; the curves were forced to match the actual data curve at the surface. Matching was accomplished by using the known elastic deflection and solving for the modulus of elasticity; therefore, this modulus was used to calculate the theoretical deflections to a depth of 12 ft. As can be seen, the comparison is worse for item 4 than for item 3. Also evident is the fact that the elastic deflection distributions of each item were different from those predicted by elastic theory.

Figure 79 shows for item 3 a comparison of the measured elastic deflection basin (offset versus deflection) at a depth of 7.5 ft with the

theoretical basin (reference 2). At a point on a horizontal plane in a mass, the assumptions of a linearly elastic, homogeneous, isotropic half-space should be approximately valid and the theoretical elastic deflection basin should be a good prediction; however, as can be seen, the comparison is worse, than for the theoretical and measured maximum elastic deflection versus depth curves. A similar plot for item 4 is not included, but it would show the same results.

In figure 54, the theoretical equivalent single-wheel load (ESWL) curve has been plotted for each item versus the ESWL curve calculated from the actual data. These curves are for the 12-wheel 360,000-lb load. The theoretical ESWL is based on the same theoretical deflection factors used for the curves in figures 52 and 53. A complete discussion of the theory and concepts of the ESWL is given in Volume IV of this series.

Figures 55-62 include only item 3 because plots for item 4 showed exactly the same behavior even though the values were different. These curves also show only the static load test data presented in figures 27-30; however, the dynamic load test data would produce the same curves.

Figure 55 is a log-log plot of wheel load versus elastic deflection for the single wheel. A curve results for each gage depth and the series of curves are approximately parallel. The important result to notice on this plot is that curvilinear relationships exist. Figure 56 is for the same single-wheel data but on a semilog plot; the curves show a greater degree of curvilinear relationship. Figure 57 is the single-wheel data again but on an arithmetic plot; however, as is evident, the relationships are linear for the range of loads run in the MWHGL tests.

Figure 58 is an arithmetic plot of wheel load versus elastic deflection for the 12-wheel assembly. The plot shows that a curvilinear relationship exists and is opposite to the results of the single-wheel arithmetic plot. Figure 59 is the same 12-wheel assembly data on a log-log plot; however, opposite to the arithmetic plot for the same load and opposite to the log-log single-wheel plot, this plot shows linear relationships. If this log-log plot were carried out for several more log cycles of both wheel load and elastic deflection, the plots would still be linear and would try to approach zero. On this plot, the lines pass through a range 0.001 to 0.003 in. on the deflection axis.

The twin-tandem wheel loads versus elastic deflections plotted on log-log scales show the same linear behavior as the 12-wheel plots. This is shown in figure 60. If the linear relationships on the log-log plots are assumed to be true, then the twin-tandem 42,000-lb wheel load (design wheel load of the Boeing 747), which is bracketed by both the 30,000- and 60,000-lb wheel loads, is immediately and accurately known. This is the interpolation for the twin-tandem 168,000-lb load elastic deflections presented earlier in figure 8 for item 3. The same interpolation was performed for item 4, resulting in the twin-tandem 168,000-lb elastic deflections in figure 15. Extending the above linear concept to the 6-wheel tests, which included only one wheel load, would result in the log-log plot in figure 61.

The last figure presented in this analysis is figure 62, which is stress versus strain for item 3. Strains were calculated by taking the difference between deflection gage elastic responses for each load and assembly and dividing by the distance between the gages. Stresses were obtained from the elastic stress versus depth plots for each load at the midpoint of the deflection gage distances. Stress versus strain curves, drawn from the calculated data, represent each layer or depth range. All of these curves are curvilinear. Actual values used for obtaining these curves are shown.

The main and most important conclusions drawn from this brief analysis of soil behavior patterns with respect to the MWHGL test section are: (a) the soil has a nonlinear stress-strain behavior that varies with depth and also load intensity; (b) the theoretical predictions of deflections are not good; (c) behavior of the pavement structure under multiple-wheel loads is substantially different from behavior under single-wheel loads, which indicates that the principle of superposition is not valid; and (d) even though item 4 showed different strain distribution characteristics, its soil behavior patterns on log-log plots are the same as those of item 3 but are shifted slightly to the right due to the elastic deflections being greater.

SECTION IV

RIGID PAVEMENT TEST PROGRAMS

1. INSTRUMENTATION

The rigid pavement test section was instrumented to measure pavement deflection, surface strain, and subgrade pressure during static and dynamic load tests and under traffic. Complete descriptions of the test section, the instrumentation, and the techniques used in installation of the transducers are given in Volume III-A, as well as details of the sophisticated data acquisition system.

A total of 67 data points were established in the four rigid pavement test items. The locations were selected to collect data to adequately define the response of the pavement structure to multiple-wheel heavy gear loads.

Soil pressure was measured by eight pressure cells located at the pavement-subgrade interface, two positioned 3 ft deep in the subgrade, and two cells installed 7 ft deep in the subgrade directly under the 3-ft-deep cells. These locations were chosen because the pavement-subgrade interface was expected to be the area of highest pressure, the 3-ft-depth was the point at which the pressure was anticipated to be one-half of the interface pressure, and the 7-ft depth was the point at which the areas of influence of the leading and trailing six-wheel bogies were estimated to start overlapping.

Twenty-seven deflection gages were installed to measure both total and partial deflection. The total- and partial-deflection gages were intended to measure the recoverable and nonrecoverable deflections occurring in the entire rigid pavement structure and within a selected depth of the subgrade material, respectively.

Strain gages were installed to measure strain at the top surface and near the bottom surface of the rigid pavement.

2. TESTING EQUIPMENT

The testing equipment was the same as that used for the static load, dynamic load, and traffic tests of the flexible pavement test section.

3. PRELIMINARY TEST PROGRAM

Before the major instrumentation program was initiated, preliminary tests

were made to describe the magnitude of the response of the pavement to various loading conditions and to check the operation of the instrumentation system. The preliminary tests are described in Volume III-A and are summarized below.

Based on the results of plate bearing tests and confirmed by initial static load tests, a minimum of 3 min was established for the load to be in position during static load tests. The recordings made during these initial tests, conducted without high-frequency noise filters, showed poor signal-to-noise ratio. Electrical filters were installed and gain settings were then established for anticipated strain, deflection, and pressure response for all programmed load conditions.

4. MAJOR TESTING PROGRAM

a. Schedule of Tests

The major instrumentation testing program was initiated upon completion and evaluation of the preliminary tests. The major testing program can best be described by breaking the testing program into three different parts: (1) static load tests, (2) dynamic load tests, and (3) traffic tests. The static and dynamic load tests were conducted with single-wheel, twin-tandem, 6-wheel, and 12-wheel gear configurations with loads of 15,000 lb per wheel and 22,500 lb per wheel. The traffic tests were conducted with the 12-wheel assembly loaded to 30,000 lb per wheel and with the twin-tandem assembly loaded to 41,500 lb per wheel. These were the regular traffic tests (described in Volume II) during which the responses of the pavement system to traffic were monitored.

b. Test Procedures

The details of the test procedures used in the major instrumentation test program are presented in Volume III-A; a brief summary is given below.

(1) Loading patterns. The loading patterns, i.e., the sequence in which the static loadings were applied, were not important as all loads were relatively small and did not approach the failure loads for the test items. The loading patterns for the dynamic load tests were selected to complement information to be gained during the traffic testing portion of the program.

The lines of application were selected to obtain information on the effects of moving loads near a longitudinal joint in the center of each

test item and at various locations between these two extremes. The width between lines was established by the tire print width by making the lines very nearly one tire print width apart. The loading pattern consisted of one forward pass and one reverse pass on each line.

The loading pattern selected for the 12-wheel-assembly traffic portion of the test was chosen to achieve a crude approximation of normal distribution laterally across the longitudinal joint. A complete loading pattern consisted of 22 passes of the test cart.

The loading pattern for the twin-tandem-assembly traffic portion of the test was selected in an attempt to provide an approximation of normal distribution laterally across a 120-in.-wide traffic area. Traffic was applied to the center of the north paving lane; that portion of the test item near the longitudinal joint saw no traffic. A traffic pattern consisted of 30 passes of the twin-tandem assembly.

(2) Loading points. The Corps of Engineers rigid pavement design method is based on a correlation between stresses developed in the pavement slab through flexural behavior under load with performance under cyclic loading. The loading points for the static load portion of the program were selected to provide comparative data on jointed edge loading versus interior loading, to provide comparative readings for single-wheel, twin-tandem, and 6-wheel- and 12-wheel-assembly loadings, and to provide information on interaction between wheels for the assemblies containing more than one wheel.

The equipment used to apply the 12-wheel loadings was a large prime mover with four low-pressure outrigger wheels towing special load boxes. A finite element analysis was performed to determine the influence of the outrigger wheels on pavement deflection and stress. The results of the analysis indicated that the behavior of the test section was not felt to be influenced to a measurable degree by the outrigger wheels.

(3) Application of loads. A no-load reading was taken for all gages immediately prior to testing. The no-load readings were taken with the loading rig completely off the test item. The load was then positioned as required and data recorded for at least 3 min before the test cart moved to the next location. This test procedure was employed for all static load tests: single-wheel, twin-tandem, and 12-wheel assemblies. Sequence of load positions was

dictated by convenience, i.e., the least amount of maneuvering of the test cart.

Dynamic load tests were conducted on all test items with the single-wheel, twin-tandem, and 12-wheel assemblies. Loads were applied along each of six traffic lines with the test cart facing west and traveling west and then the test cart was backed along the same line. Each item was tested separately to provide the most accurate no-load readings.

The traffic test portion of the study using the 12-wheel assembly was conducted with a 30,000-lb-per-wheel loading (gross loading 360,000 lb). Traffic was applied along five traffic lines in a sequence that would produce a favorable transverse distribution of traffic across the pavement.

After completion of the 12-wheel-assembly traffic, traffic was applied to the north lane with the twin-tandem assembly loaded to 41,500 lb per wheel (166,000 lb gross load). Twin-tandem traffic was applied along five traffic lines that were positioned so as to predict the performance of a pavement loaded with the twin-tandem assembly operating parallel to a joint by inference from observation of the performance of the pavements near the transverse joints. This was necessary because the 12-wheel-assembly traffic had already been placed across the longitudinal joint and had failed the keyed joint for the entire length of the test track.

During the 12-wheel-assembly trafficking phase of the test, periodic tests were conducted with the Dynaflect on all test items at the end of the day.

(4) Monitoring instrumentation. The oscilloscope monitor was used for calibration and to check the instrumentation system prior to actual testing. Continuous, permanent records of all tests were obtained on magnetic tape. Voice logging was used to identify all test parameters to aid in the analog playback of data. Oscillograph printouts were used to periodically sample the output channels for preliminary data analysis on a real-time basis.

SECTION V

RESULTS AND ANALYSIS OF DATA FOR RIGID PAVEMENT

A listing of the basic data collected during the rigid pavement tests is presented in Appendix B to this volume. These data are complementary to the information presented in the following paragraphs. The analysis includes data for static and dynamic load tests for single, twin-tandem, 12-wheel-, and 6-wheel-assembly loadings, from 15,000 to 41,500 lb per wheel. The data consist of measurements of deflection, strain, pressure, crack width, and deflection response to vibratory loading.

1. STATIC LOAD TESTS

The data collected under single-wheel, twin-tandem, and 12-wheel-assembly loadings agreed reasonably well with that predicted by Westergaard analysis. Poor results were obtained with the embedded strain gages due to corrosion and with the pressure cells due to loss of bond between the strain gage and pressure-sensing diaphragm.

Design calculations indicated that approximately 50, 75, and 90 percent of the pavement structure deflection should occur within subgrade depths of 3, 5, and 9 ft, respectively. The results of the static load tests indicated that the above-mentioned percentages versus depths were reasonably close for single-wheel and twin-tandem assemblies, but were somewhat in error for the 12-wheel assembly. Under the 12-wheel assembly, the percentages were closer to 30, 60, and 80 percent for the same depths mentioned above. It should be noted that the design calculations were crude and represent an average for all test items, as do the 30, 60, and 80 percentage figures cited above.

The static load test data indicated that the 3-min waiting period for the full deflection to develop was reasonable. The deflection versus time curve was somewhat linear during the first 15 sec of loading and appeared to become asymptotic at about 3 min.

The loads chosen for the static load tests were selected to avoid distress in any of the test items. The results of all tests, i.e. static, dynamic, and traffic, apparently confirmed that no measurable distress resulted from any of the static tests.

2. DYNAMIC LOAD TESTS

The dynamic tests were intended to provide data on pavement response to rolling loads and comparative data on single-wheel, twin-tandem, and 12-wheel loadings.

As indicated by analytical studies, the deflections in the vicinity of the longitudinal joint were slightly larger than deflections along the transverse joint and in the interior of the test pavements. The embedded strain gages located near the longitudinal and transverse joints were too erratic to permit generalizations to be drawn, but using the deflection measurements and analysis as a basis of comparison, strains in the vicinity of the joints were probably higher near the longitudinal joint than at the transverse joint or slab interior. Generally speaking, the dynamic deflections were between 75 and 80 percent of the 3-min static deflection reading, indicating the time dependency of the pavement structure deflection. The test carts were traveling at about 3 mph during these tests.

3. TRAFFIC TESTS

a. 12-Wheel Assembly

The instrumentation data collected during the traffic portion of the study are presented in Appendix B to this report. These data were reduced from oscillograph traces produced periodically on site during the entire traffic test period. They represent peak values of strain or deflection for each pass of the test cart for each traffic line. Graphical representations of these data are included in figures 83-104. An attempt was made to predict when the keyed longitudinal construction joint failed under traffic from these plots.

Theoretical deflections are shown in the figures for gages PD and DSJL. These values represent theoretical deflections for a perfectly efficient joint, or interior loading, and for a completely inefficient joint, or free-edge loading. From these plots it appears that the keyed joint failed at the following traffic levels:

Item 1 - 15 traffic patterns

Item 2 - 58 traffic patterns

Item 3 - 25 traffic patterns

Thus it is apparent that the keyed joint failed rather early in the traffic tests.

In rigid pavement design and analysis, a rather complex problem arises when the loadings are applied by wheels in tandem such that some interaction occurs. It is never clearly evident whether the pavement has responded to two separate loadings or one large loading or some level of loading between the two. The 12-wheel assembly was quite complex in this respect as the load wheels are asymmetric and produce a complex waveform when traversing across a point on the pavement. The strain and deflection transducers show a definite distinction between the two leading wheels and the four trailing wheels of each 6-wheel set, and some interaction between the 6-wheel sets occurs as the pavement is subjected to the 12-wheel load. This response is typified by the plot shown in figure 105. It should be noted that the response traces varied with changes in the radius of relative stiffness and figure 105 is intended merely to indicate a typical trace. The approach that has been used in the past to handle this situation was to treat the largest strain or stress or deflection as one loading and ignore smaller values. The approach loses validity as the number of load wheels increases and as the gear configuration becomes more complex. A more reasonable approach can be used to compare pavement performance with a history of all strain, stress, or deflection excursions that occur as a particular gear passes a point on the pavement. An approach of this type would provide a method for handling multiple-wheel gears, which tend to wrinkle the pavement extensively but do not stress any particular point unduly. This approach would also accommodate the randomness in which loads are applied to real pavements.

An analysis of this type was attempted for the data collected during 12-wheel traffic tests. Hard copies of instrumentation output were produced periodically during the entire period of accelerated traffic testing. Data were reduced from these hard copies manually, i.e., peak values of strain and deflection were computed for each operational transducer. These data are presented in Appendix B to this report. Histograms were prepared from these data to indicate the number of times a deflection or strain of a certain magnitude was experienced by the pavement (figures 106-111). A linear interpolation was applied to the data to predict values that were not reduced from hard copies. For example, referring to Appendix B, Table B15, Test Item 3,

Gage 3SCL registered a maximum strain of 36 $\mu\text{in./in.}$ for traffic pattern 15 in traffic lane 1 on pass number 1 and registered a maximum strain of 44 $\mu\text{in./in.}$ for traffic pattern 20 for the same traffic lane and pass number. The maximum strains registered in traffic patterns 16, 17, 18, and 19 were predicted by linear interpolation as follows:

<u>Pattern</u>	<u>Interpolation</u>	<u>Maximum Strain</u>
15	None	36 Measured
16	$\frac{44 - 36}{20 - 15} \times (16 - 15) + 36$	38 Predicted
17	$\frac{44 - 36}{20 - 15} \times (17 - 15) + 36$	39 Predicted
18	$\frac{44 - 36}{20 - 15} \times (18 - 15) + 36$	41 Predicted
19	$\frac{44 - 36}{20 - 15} \times (19 - 15) + 36$	42 Predicted
20	None	44 Measured

These data were then grouped into sets of the nearest 5 $\mu\text{in./in.}$ and the number of times each set of 5 $\mu\text{in./in.}$ was experienced was plotted. An example for gage 3SLC is shown in figure 111. This plot indicates the number of times the maximum strain reached certain values within a range of 5 $\mu\text{in./in.}$ For example, referring to figure 111, the maximum strain was between 27.5 and 32.5 (30) 520 times. This figure includes all traffic patterns and all traffic lanes.

A typical trace of strain versus distance was then selected from the hard copies for a particular traffic lane and the total strain excursions experienced by the gage were plotted, see figure 105. These strain excursions were considered typical for a particular transducer and a particular traffic lane. The representative trace for a particular traffic line was considered to be the trace that occurred most frequently. Using this trace as the base, the probable excursions for other traces with different maximums were calculated by straight-line interpolation. For example, the trace shown in figure 105 indicates a maximum strain of 71 $\mu\text{in./in.}$ and a series of excursions of 71, 29, 20, 42, 50, 40, 22, and 52. A trace along the same traffic line, but with a maximum of 50 $\mu\text{in./in.}$ would be predicted to have a series of excursions of 50, 20, 14, 30, 35, 28, 15, and 37 by multiplying by a constant of

50/71. The technique was employed to produce histograms of strain and deflection excursions for each gage.

The histograms show the severity of the excursion as well as the number of times any excursion level was experienced. These figures include maximum values as well as minor excursions and incorporate the influence of loadings at some distance from the transducer as well as those directly over the transducer. They relate directly to the total amount of strain energy being introduced into the rigid pavement slab.

A relative index was established for comparison of the histograms. Weighted areas were calculated for the histograms at the initial-crack level and at the end of the test. The weighting functions were based on arbitrary values of deflection and strain. All deflection excursions were ratioed to a deflection of 0.05 in. and multiplied by the number of occurrences for a weighted area. The value of 0.05-in. deflection was chosen because this is the approximate value of deflection at initial failure for most rigid pavements. All strain excursions were ratioed against a strain of 200 μ in./in. as this is the approximate value of strain at initial failure for most rigid pavements. Weighted areas thus computed are presented in table 6.

This method of describing the total energy put into the pavement seems to have merit even though it is in a rudimentary stage of development. A relationship between thickness and weighted area may be established to arrive at an allowable energy input that would consider all loadings rather than only maximum values.

b. Twin-Tandem Assembly

Only strain data were collected during the twin-tandem trafficking portion of the study. These data are presented in tabular form in Appendix B to this report in table B17. These values presented in the table represent only the maximum strains observed during a given pass of the assembly. These data are presented in graphical form in figures 112-118. The graphical form is a consolidation of the tabular data in that only the largest strain observed during one traffic pattern is presented, whereas the tabular data represent the largest strain observed during one pass of traffic.

The strain data under twin-tandem loading also reflects strain reversals and strain relief as the assembly traverses a particular point on the

Table 6
Weighted Areas for Histograms

Item No.	Gage Identification	Weighted Areas	
		First Crack	End of Test
1	13PD	1,668	28,215
	19PD	8,830	31,981
	1SCL	1,064	7,919
	1SCT	325	6,425
	1SNJL	379	4,576
2	29PD	51,378	57,041
	2DSJL	59,412	66,001
	2SCL	11,029	12,248
	2SCT	2,853	3,165
	2SWJT	10,046	11,153
	2SSJL	13,969	15,495
3	33PD	11,787	27,695
	3DC	12,071	26,809
	3DEJT	28,617	66,258
	3DWJT	28,754	64,223
	3JCL	911	2,066
	3JCT	2,793	6,562
	3SWJT	4,312	9,799

pavement. This wrinkling of the pavement again raises the question of how to handle strain relief between the tandem wheels and how much relief is required before the pavement performs as if it were trafficked by two independent twin-wheel assemblies. Histograms were prepared for the twin-tandem-assembly traffic data in the same manner as described for the 12-wheel assembly. Histograms for the entire traffic test period are presented in figures 119 and 120. Unfortunately, these histograms are incomplete because of strain gage failures. Only gages 2NSCT and 2NSCL survived the entire 68 patterns of twin-tandem traffic. Gage 2NSEJT failed after one traffic pattern, so no histogram was prepared for that gage. All strain gages were cemented to the top slab surface and were subjected to damage by wheel loads and some were failed by cracking of the test pavements. Sufficient data were available, however, to indicate the general shape the histograms tended to develop.

4. DYNAFLECT MEASUREMENTS

Some typical results of the periodic Dynaflect tests are shown in Appendix B to this report, table B16. These results are rather difficult to interpret as the deflections were extremely small and subject to considerable influence from temperature effects. No general trends appear in the data except for those at widely spaced time intervals, such as those taken in late October and early December 1969. The general trend in this time frame is reduction in deflection, which may have resulted from an increase in the subgrade modulus. Considerable pumping had occurred on some of the items during this time frame, which should have been reflected as a general increase in deflection. Also, when the apparatus was operated in the center of the slab, the deflections were higher on a slab that had been overlaid with a nonrigid overlay than previous measurements made on the same slab immediately prior to overlapping. These anomalies tend to reduce the usefulness of the Dynaflect data.

SECTION VI

NONDESTRUCTIVE VIBRATORY TESTS

The nondestructive vibratory tests, which were conducted during the construction of both the flexible and rigid pavement test sections, during application of traffic, and at the completion of traffic, are described in Volume III-A. Testing was continuing at the time this series of reports was written. The following is a brief statement of preliminary findings; a detailed analysis and a tentative evaluation procedure will be published at the completion of the nondestructive testing program (reference 4).

1. WAVE VELOCITY MEASUREMENTS

Wave velocity data were obtained on both the flexible and rigid pavement sections. One half of the wavelength has been found to be approximately the effective depth of the measurement, and the wave velocities were plotted at a depth equal to one half the wavelength.

Wave velocity tests were made on the flexible pavement items on top of the various pavement layers during construction. This information is shown in figures 121-125. There is an apparent increase in the velocities of the underlying layers due to the overburden effect. Wave velocities prior to application of traffic are presented in figures 121-125 for the flexible section, figures 126-129 for the south lane of the rigid sections, and figures 130 and 131 for items 1 and 4 of the rigid pavement with asphaltic concrete overlay. Actual pavement thicknesses are also shown in figures 121-131; these indicate that the half-wavelength theory is not exact, especially in determining thickness of the upper layers. Changes in velocity measurements during trafficking of the flexible pavement sections are shown in figures 132-134.

Poisson's ratio and E-moduli determinations, based on shear- and compression-wave velocity measurements, are given in table 7 for the flexible pavement items, table 8 for the rigid pavement items, and table 9 for the rigid pavement with an asphalt overlay. Poisson's ratio for the rigid pavement slabs was assumed to be 0.20.

2. PAVEMENT RESPONSE TO VIBRATORY LOADING

Figures 135 and 136 present plots of elastic deflection and elastic stress,

Table 7

Wave Velocity Test Results, Flexible Pavement Lane 1

Item No.	Approximate Depth $\lambda/2$ ft	Wave Velocity V_s , fps	Poisson's Ratio ν	Compression Modulus E, psi	Item No.	Approximate Depth $\lambda/2$ ft	Wave Velocity V_s , fps	Poisson's Ratio ν	Compression Modulus E, psi
1	0.235	2810	--	--	3	15.30	455	0.47	15.5
	0.30	3000	0.25	774.0		22.60	452	0.49	15.9
	0.48	1910	0.25	313.7	4	0.25	2950	--	--
	0.62	1120	0.27	107.8		0.29	2890	--	--
	0.79	1100	0.29	108.5		0.42	2490	0.25	533.2
	0.81	810	0.49	53.1		0.49	1948	0.25	326.3
	1.40	800	0.49	51.8		0.56	1680	0.25	242.7
	1.50	580	0.40	22.3		0.64	1280	0.25	140.9
	2.00	600	0.40	23.9		0.66	1190	0.25	121.8
	2.70	540	0.42	19.4		0.68	1090	0.29	105.0
	3.10	549	0.41	20.0		0.78	885	0.37	72.0
	3.30	455	0.45	14.2		0.80	1120	0.27	84.5
	3.40	506	0.43	17.6		0.91	905	0.49	66.2
	4.40	440	0.45	13.3		0.96	955	0.49	73.7
	5.50	440	0.41	12.9		1.10	873	0.49	61.6
	7.00	417	0.42	12.6		1.40	840	0.49	57.1
	7.70	385	0.44	11.1		1.90	840	0.49	57.1
	9.60	382	0.44	10.9		2.20	832	0.49	56.0
	13.60	405	0.43	12.3		2.20	820	0.49	57.1
	26.30	525	0.37	19.3		2.40	720	0.49	42.0
2	0.225	2800	--	--		3.10	615	0.45	26.0
	0.32	3170	0.25	891.3		3.50	630	0.44	27.3
	0.52	2180	0.25	421.5		3.70	592	0.45	24.1
	0.74	1330	0.25	156.9		4.10	535	0.46	19.7
	0.87	870	0.49	61.2		5.30	525	0.46	19.0
	0.89	889	0.49	63.9		6.70	530	0.46	19.3
	0.89	885	0.49	63.3		7.30	430	0.47	12.7
	1.30	798	0.49	51.5		8.30	415	0.36	12.0
	1.60	790	0.49	53.7		10.30	412	0.36	11.9
	2.10	828	0.49	55.4		13.80	414	0.36	11.9
	2.20	670	0.41	31.2		24.30	486	0.30	15.9
	2.60	650	0.42	29.3	5	0.20	3200	0.50	1026.0
	3.10	567	0.44	23.1		0.255	3570	0.50	1277.0
	3.20	645	0.42	28.9		0.28	3370	0.50	1138.0
	3.25	520	0.45	19.4		0.31	3100	0.25	800.5
	4.00	527	0.45	20.0		0.48	2850	0.25	676.6
	5.50	550	0.33	21.1		0.60	2400	0.25	479.8
	6.60	530	0.34	19.6		0.72	1440	0.25	172.7
	6.90	415	0.41	12.5		0.77	1380	0.25	158.6
	8.20	410	0.42	12.2		0.90	940	0.49	71.4
	10.30	410	0.42	12.2		1.00	825	0.49	55.0
	15.70	440	0.40	14.0		1.04	1040	0.49	108.4
	26.50	530	0.49	21.8		2.10	820	0.49	54.4
3	0.20	3040	0.50	--		2.30	805	0.49	52.4
	0.25	2510	0.50	--		2.60	780	0.49	49.2
	0.34	2020	0.25	372.9		3.10	620	0.49	31.1
	0.39	1540	0.25	216.7		3.20	576	0.49	26.8
	0.45	1340	0.25	164.1		3.70	585	0.45	23.5
	0.68	1360	0.25	169.1		4.40	575	0.45	22.7
	0.71	1280	0.25	149.7		5.60	555	0.46	21.2
	0.77	1080	0.25	106.6		7.20	572	0.31	18.4
	0.86	860	0.49	59.8		7.50	447	0.39	12.1
	1.10	880	0.49	62.6		10.70	426	0.40	10.9
	1.20	732	0.49	43.3		14.20	410	0.41	10.1
	1.70	750	0.49	45.5		23.20	463	0.49	13.9
	3.00	600	0.45	24.8					
	3.10	558	0.45	21.4					
	3.40	536	0.46	19.8					
	4.00	520	0.46	18.6					
	5.20	520	0.46	18.6					
	6.40	500	0.37	17.5					
	7.05	423	0.41	12.9					
	10.30	410	0.41	12.2					

Table 8

Wave Velocity Test Results, Rigid Pavement South Lane

Item No.	Approximate		Wave Velocity V_s , fps	Poisson's Ratio ν	Compression Modulus E, psi	Item No.	Approximate		Wave Velocity V_s , fps	Poisson's Ratio ν	Compression Modulus E, psi
	Depth ft	$\lambda/2$					Depth ft	$\lambda/2$			
1	0.69		5650	0.20	2395.8	3	1.80		5950	0.45	2479.9
	0.96		6750	0.45	3191.6		2.80		4200	0.45	1235.7
	1.43		5120	0.45	1836.3		3.60		3600	0.40	782.6
	2.25		4500	0.45	1418.5		5.10		2040	0.40	251.3
	2.90		3660	0.45	938.3		7.20		1800	0.40	195.7
	3.80		2310	0.40	322.2		7.80		1330	0.40	106.8
	4.00		1600	0.40	154.6		8.40		1670	0.40	168.4
	4.70		1190	0.40	85.5		10.20		1120	0.40	75.7
	5.50		660	0.40	26.3		10.60		636	0.40	24.4
	7.00		1120	0.40	75.7		12.30		613	0.40	22.7
2	7.00		1400	0.40	118.4	4	1.20		4800	0.45	1613.9
	7.30		1320	0.40	105.2		1.30		4420	0.45	1368.5
	8.00		640	0.40	24.7		1.45		4360	0.45	1331.6
	8.60		1720	0.40	178.6		1.70		3010	0.45	634.6
	9.80		493	0.40	14.7		2.20		3300	0.45	762.8
	11.30		454	0.40	12.4		2.80		2800	0.45	549.2
	15.80		476	0.40	13.7		3.70		2220	0.40	297.6
	0.95		5700	0.20	2438.4		5.45		935	0.40	52.8
	1.90		4940	0.45	2213.1		5.50		2200	0.40	292.3
	2.20		4400	0.45	1755.7		5.60		840	0.40	42.6
	2.70		4040	0.45	1480.2		6.00		1500	0.40	135.9
	3.50		3490	0.40	735.5		7.40		814	0.40	40.0
	5.60		2240	0.40	303.0		7.90		636	0.40	24.4
	7.60		1900	0.40	218.0		8.40		500	0.40	15.1
	8.30		1490	0.40	134.1		9.50		475	0.40	13.6
	9.20		647	0.40	25.3						
	9.70		580	0.40	20.3						

Table 9
Wave Velocity Test Results, Rigid Pavement
with Nonrigid Overlay, North Lane

Item No.	Approximate Depth $\sqrt{2}$ ft	Wave Velocity V_s , fps	Poisson's Ratio ν	Compression Modulus E 10^3 psi
1	0.55	6475	0.20	4060.0
	0.905	6650	0.20	4280.0
	1.38	5700	0.45	2275.9
	1.495	5375	0.45	2023.7
	2.56	4095	0.45	1174.6
	3.38	4720	0.40	1345.3
	3.70	2960	0.40	529.1
	5.08	2030	0.40	248.8
	6.43	1158	0.40	80.0
	10.00	800	0.40	38.6
2	0.815	5900	0.50	3265.7
	0.99	5155	0.20	1994.4
	1.36	4960	0.20	1846.4
	1.57	5090	0.20	1944.4
	1.58	4750	0.20	1693.4
	2.26	4500	0.45	1418.5
	2.66	4000	0.45	1020.8
	3.88	3605	0.45	910.3
	5.98	2985	0.45	624.1
	8.86	2660	0.40	427.3

respectively, with depth for various conditions of vibratory loadings and static loadings on item 4 of the flexible test section. Deflection and stress produced by the vibrator, although only a fraction of corresponding values beneath the static wheel loads, are proportional with depth. Deflection at a depth of 12 ft was read from a reference rod with the load cart located adjacent to the rod; the 12-ft deflection was not obtained beneath the vibrator.

3. SURFACE DEFLECTION TESTS

a. Load-Deflection Relationships

Vibratory load deflection data obtained prior to application of traffic to the pavement test items are shown in figures 137 and 138. The data points for each test item represent frequencies of 5-15 Hz. Also shown

in these plates are deflections measured beneath static single-wheel loads with contact areas of 285 sq in. In figure 137, except for the 40-kip load, data for single-wheel static load tests on items 3 and 4 were obtained from instrumentation response. All other data were obtained from optical readings. Figure 139 shows a change in the vibratory load-deflection relationship with application of traffic and different pavement temperatures. At the time this report was written, testing was continuing on untrafficked areas to determine the change in deflection with temperature. During a particular test, it was found that varying the eccentric setting of the rotating masses did not affect the load-deflection relationship, as shown in figure 140, even though the force level was varied at a given frequency. The data for figure 140 were taken along the north edge of the flexible sections that have not been subjected to traffic.

b. Vibratory Pavement Stiffness

Table 10 presents stiffness values for the various pavement sections. Pavement temperature was found to have a significant effect on stiffness of the flexible pavements. Stiffness values measured on the flexible test items prior to application of traffic were found to correlate with total pavement thickness above the subgrade, as can be seen in figure 141. Thickness of the portland cement concrete also showed a relationship to stiffness as shown in figure 142. The data used in figure 142 were taken on 16 October 1969 after trafficking had begun because pretraffic data were not felt as reliable due to equipment problems.

c. Deflection Basins

A comparison of typical basin shapes for each test item is given in figure 143 for the flexible pavement and in figure 144 for the rigid pavement. Dynamic force applied to the pavement to produce the deflection basins is shown in the figures along with the frequency of vibration.

Table 10
Vibratory Stiffness

Date	Type Pavement	Lane	Item No.	Coverages*	Pave-ment Temp, deg	Eccen- tricity deg	Stiff-ness kips/in.
4 Aug 69	Flexible	1	1	0	110	10	510
8 Sept 69		3A	1	0	100	10	740
13 Jan 70		2A	1	6	55	10	940
4 Aug 69		1	2	0	110	10	650
8 Sept 69		3A	2	0	100	10	900
14 Jan 70		1	2	200	45	10	1100
4 Aug 69		1	3	0	115	10	728
26 Aug 69		1	3	1302	130	10	1025
8 Sept 69		1	3	2342	110	10	800
8 Sept 69		(Untrafficked)	3	--	110	10	1025
5 Aug 69		1	4	0	100	10	760
26 Aug 69		1	4	1311	130	10	790
8 Sept 69		1	4	2351	115	10	800
8 Sept 69		1	4	2351	115	10	915
4 Aug 69		1	5	0	120	10	950
26 Aug 69		1	5	1320	130	10	2300
8 Sept 69		1	5	2360	120	10	1000
19 Feb 70		1	5	3208	50	10	1050
6 Aug 69	Rigid	South	1	0	--	10	1360
1 Oct 69		South	1	0	--	10	1820
16 Oct 69		South	1	160	--	10	1240
8 Jan 70		North w/overlay	1	0	50	10	2540
6 Aug 69		South	2	0	--	10	1230
16 Oct 69		South	2	160	--	10	2700
8 Jan 70		South	2	5008	--	10	2540
13 Jan 70		North	2	0	--	10	2500
6 Aug 69		South	3	0	--	10	2500
1 Oct 69		South	3	0	--	10	2400
16 Oct 69		South	3	160	--	10	4100
9 Jan '70		North	3	0	--	10	3200
6 Aug 69		South	4	0	--	10	1300
1 Oct 69		South	4	0	--	10	1530
16 Oct 69		South	4	128	--	10	1530
9 Jan 70		South w/overlay	4	4416**	44	10	2200

* The term coverages as used for the traffic tests on the flexible pavement indicates a measure of wheel load repetitions for the full tire print width on any given area of the pavement surface. For rigid pavements, coverage is a measure of the number of maximum stress repetitions that occur in the pavement due to the applied traffic. Discussion of maximum stress repetitions for each load cart is given in Volume II of this series of reports.

** Additional 240 coverages applied before nonrigid overlay was placed on rigid pavement.

SECTION VII

CONCLUSIONS AND RECOMMENDATIONS

The following conclusions and recommendations are believed justified for the instrumentation test programs of the flexible and the rigid pavement test section. Discussions of the nondestructive pavement testing were based on the testing accomplished at the time this report was written. Therefore, no conclusions or recommendations were considered warranted for the nondestructive pavement testing; they will be published when the project is completed (reference 4).

1. CONCLUSIONS

a. Flexible Pavement

(1) Instrumentation. Two of the flexible pavement items were instrumented with stress, strain, deflection, pore pressure gages, and temperature probes. The two items were the same, except for a soft layer at depth in one of them. The following conclusions are based mainly on data presented in Appendix A.

(a) At the conclusion of the static and dynamic load tests, 16 WES soil pressure cells out of a total of 17 were operating. In general, the WES cells functioned satisfactorily with accuracies of about ± 10 percent of the cell pressure indication or better.

(b) While all three SA-E soil pressure cells functioned throughout the entire static and dynamic load test periods, the output signals were erratic and were considered very unreliable.

(c) At the conclusion of the static and dynamic load tests, 16 WES soil deflection gages out of a total of 18 were operating. In general, the WES soil deflection gages functioned satisfactorily with accuracies of about ± 0.002 in. for the full linear range.

(d) Only two out of a total of eight pavement strain gages worked throughout the static and dynamic load tests, and they were of questionable behavior.

(e) One thermistor probe out of a total of four stopped working

during the static and dynamic load tests. Generally, the thermistor probes worked satisfactorily.

(f) Both WES pore pressure cells worked satisfactorily throughout the testing periods.

(2) Interpretation of data. A thorough analysis of the soil deflections under load, as depicted by the deflection gages, was conducted and resulted in identification of a load- and position-dependent moving zero reference level for each deflection gage with no residual strains being induced. The soil at all levels appeared to be behaving as a plastic and elastic mass (for lack of better terms) similar to putty, but not as a viscoelastic material.

(a) Equivalent elastic deflections were found for equivalent loading situations, either repeated loading of a gage or loadings at symmetrical loading points.

(b) An analysis of the soil stresses induced under load indicated an almost constant horizontal zero reference per soil pressure cell and the data indicated active residual stresses.

(c) Equivalent elastic stresses were found for equivalent loading situations, either repeated loading of a gage or loadings at symmetrical loading points.

(3) Results of instrumentation measurements. Due to the large amount of data available from both static and dynamic load tests and due to time limitations, only the maximum responses were evaluated.

(a) For this project the loaded assemblies that were of primary interest were the single wheel with a 30,000-lb load, 12 wheel with a 360,000-lb load, and twin-tandem interpolated 168,000-lb load. Limiting maximum elastic deflection and limiting maximum vertical elastic stress versus depth curves for these primary loaded assemblies were established for static load test results. Data developed in the analysis showed that the same relationships are true for the static and dynamic load tests.

(b) The results of dynamic load tests (2-3 mph) and speed tests (1-10 mph) showed that elastic deflections and stresses are not affected by the range of speeds run in the MWHGL tests and that the dynamic

load test results are approximately equivalent to the static load results.

(c) The pavement temperature effects study was inconclusive due to the limited range of temperatures, and the pavement strains study yielded no appreciable results due to the unreliability of the strain gages used.

(4) Analysis of soil behavior patterns. Limited study of soil behavior patterns indicated the following:

(a) Elastic deflection comparisons and elastic vertical stress comparisons for item 3 versus item 4 showed that the stress and deflection distributions of the two items were different. The difference was caused by the soft layer in item 4.

(b) If the soil is assumed to act as an elastic material, the theoretical predictions of deflection versus depth or of offset versus deflection are valid only for a single-wheel load.

(c) Analysis of behavior patterns shows that behavior under a single-wheel load is different from that under a multiple-wheel assembly.

(d) Log-log plots of wheel load versus deflection for the two items show exactly the same behavior patterns even though the instrumented items have different strain distribution characteristics; the curves are just shifted on the deflection axis.

(e) Based on the analysis, the principle of superposition is not valid, and the stress-strain characteristics of the soil are nonlinear and dependent on stress level.

b. Rigid Pavement

(1) Instrumentation and equipment. The four items of the rigid pavement test section were instrumented with strain and deflection gages and soil pressure cells, which were monitored during static and dynamic loading, trafficking, and Dynaflect testing. Based on these tests, the following conclusions were made.

(a) The techniques employed to install the instrumentation were satisfactory except for the embedded strain gages, which failed early in the pavement life.

(b) The Dynaflect testing device can be used to formulate a crude quantitative evaluation of the pavement structure, but it is of little value in providing definitive data on pavement condition. This is perhaps due to the lack of correlation between pavement performance and changes in the elastic modulus of the subgrade.

(c) The output signals from the SA-E pressure cells were found to be erratic and continuous recordings were not made during the test program.

(2) Analysis of data. The following conclusions are considered appropriate.

(a) The recoverable deformations that occurred at the depths of 3, 5, and 9 ft in the subgrade were not accurately predicted by a composite analysis involving the finite element analysis and the semi-infinite elastic half-space analysis. Closer agreement was achieved between theory and measured data for nonrecoverable deformations than for recoverable deformations. The reason for this is unknown; however, the correlation is more due to coincidence since both analyses assumed that elastic behavior occurred in the entire pavement structure including the subgrade.

(b) The Westergaard algorithm yields strain and deflection values about 25 percent greater than the measured values. This is consistent with findings from previous similar test sections.

2. RECOMMENDATIONS

Based on the results of tests of the flexible and rigid pavement test section, the following recommendations are made.

a. Flexible Pavement

(1) Analysis of data and results needs to be continued. Further and complete analysis of the large quantity of data and the soil behavior patterns of the MWHGL test section would provide a basis for, if not entirely, a completely nonlinear-inelastic constitutive equation, in terms of fundamental material constants, which would provide a fundamentally correct thesis from which a rational pavement design and evaluation procedure could be developed.

(2) A method or instrument for accurately measuring strains in pavements needs to be developed.

b. Rigid Pavement

(1) Embedment-type strain gages should be placed by a method other than that used on this test pavement. Perhaps casting the embedment gages in a beam under laboratory conditions and then embedding the beam in the pavement would yield satisfactory results.

(2) Further study of the reversals in strain and deflection under multiple-wheel assemblies should be undertaken. Some method, such as the histogram technique, is needed to incorporate the effects of interactions between the load wheels.

(3) Further studies of the data collected should be undertaken. No attempt was made to account for environmental effects, which would normalize the data and might indicate trends that are not apparent without normalized data.

(4) The LVDT gage is an excellent means of measuring rigid pavement deflection, but means of accessibility to the transducer should be provided insofar as practical.

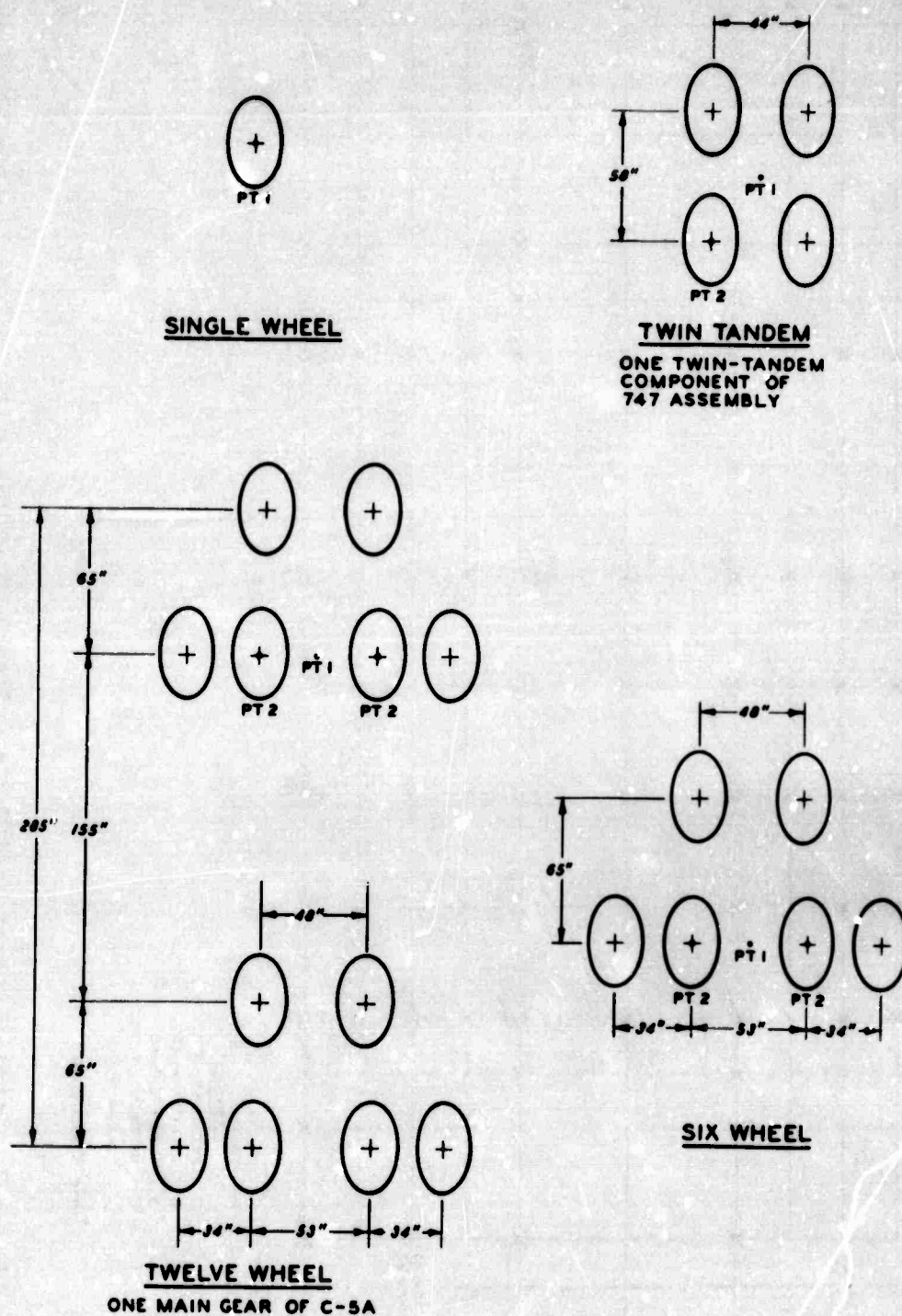


Figure 1. Locations of Loading Points of Wheel Assemblies Used in the Flexible Pavement Tests

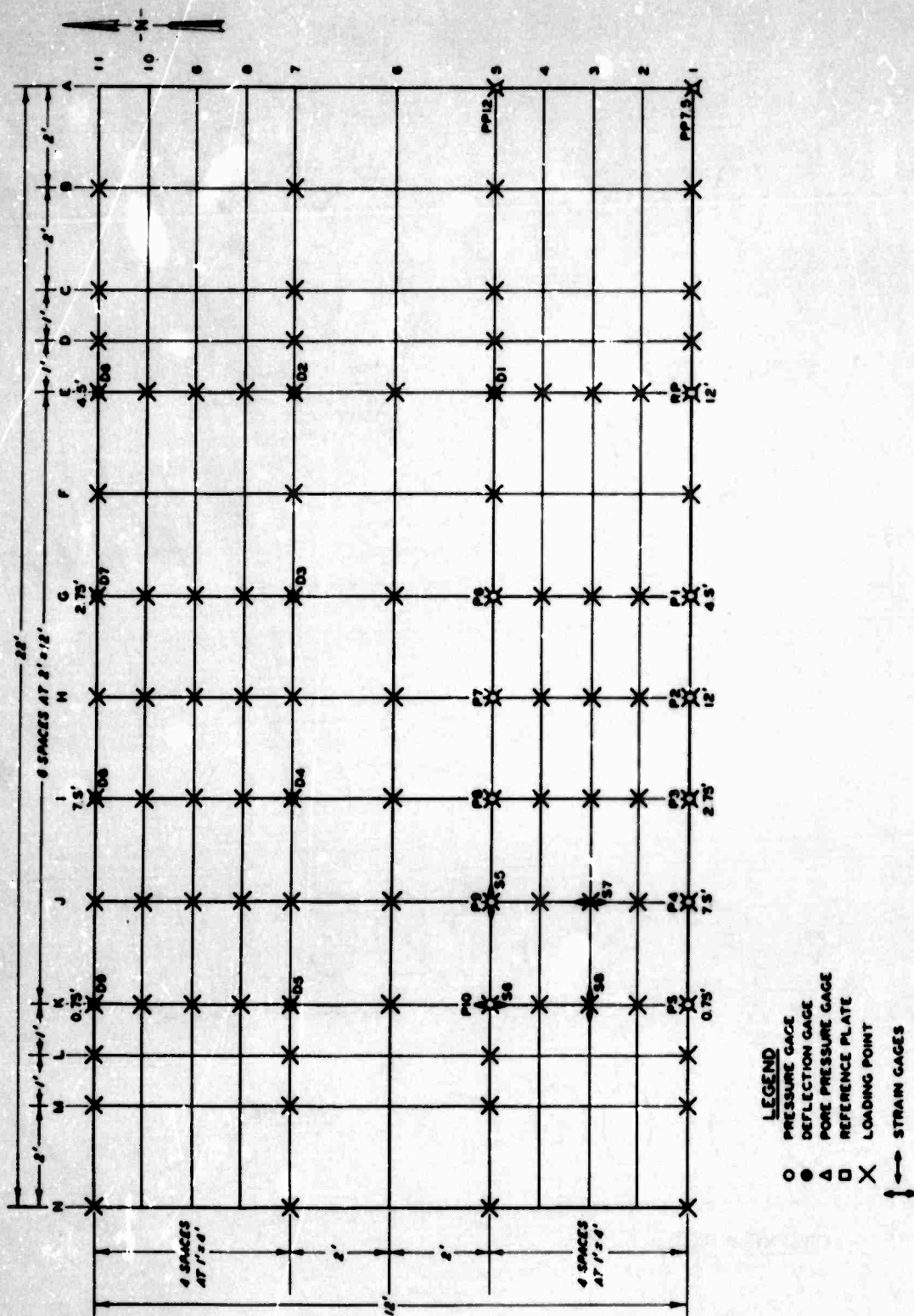


Figure 2. Static Loading Grid System, Item 3, Flexible Pavement Tests. Instrumentation Identification (Type, Number) Beside Each Symbol

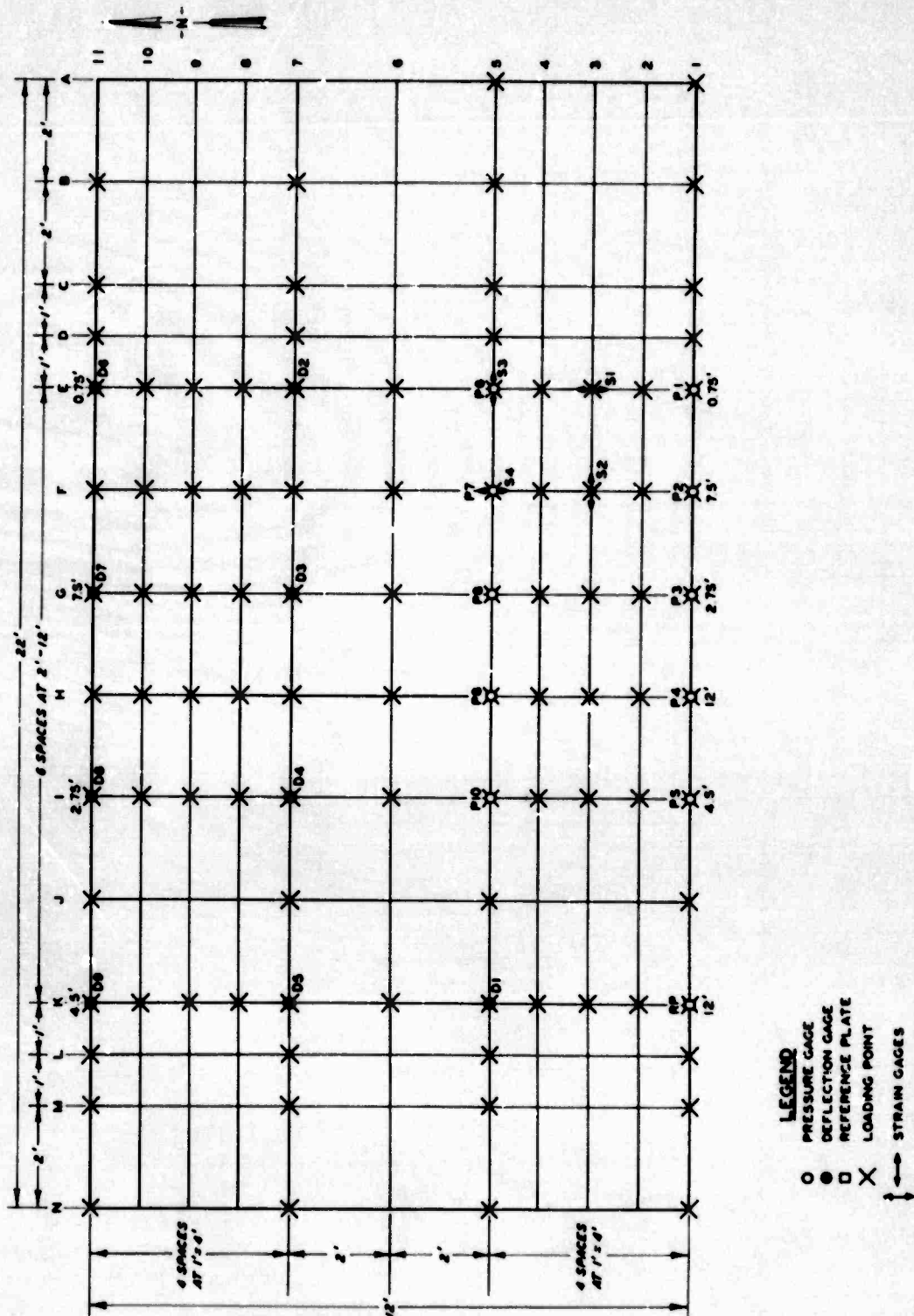


Figure 3. Static Loading Grid System, Item 4, Flexible Pavement Tests. Instrumentation Identification (Type, Number) Beside Each Symbol

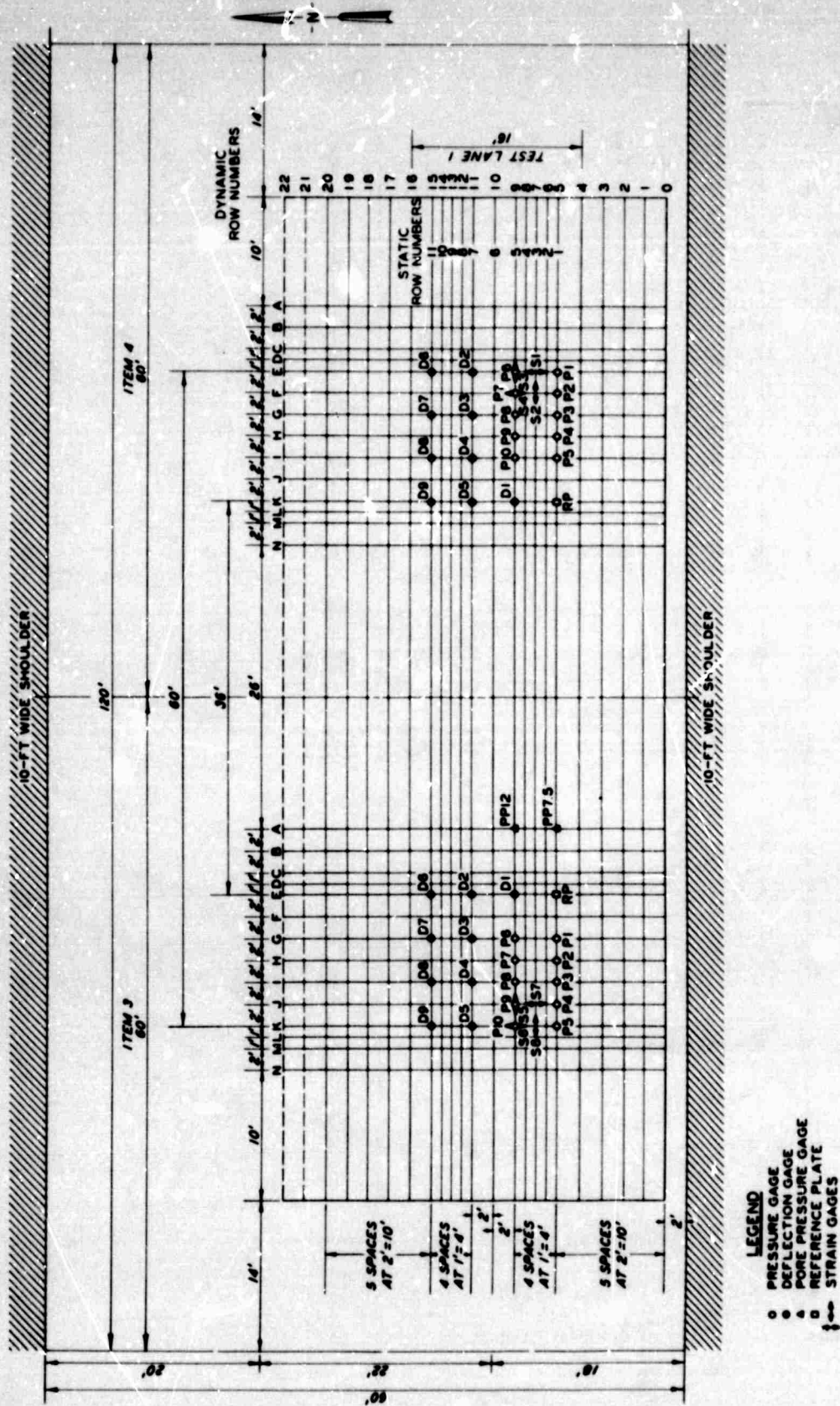


Figure 4. Static and Dynamic Load Grid System Used for Flexible Pavement Tests. Instrumentation Identification (Type, Number) Beside Each Symbol

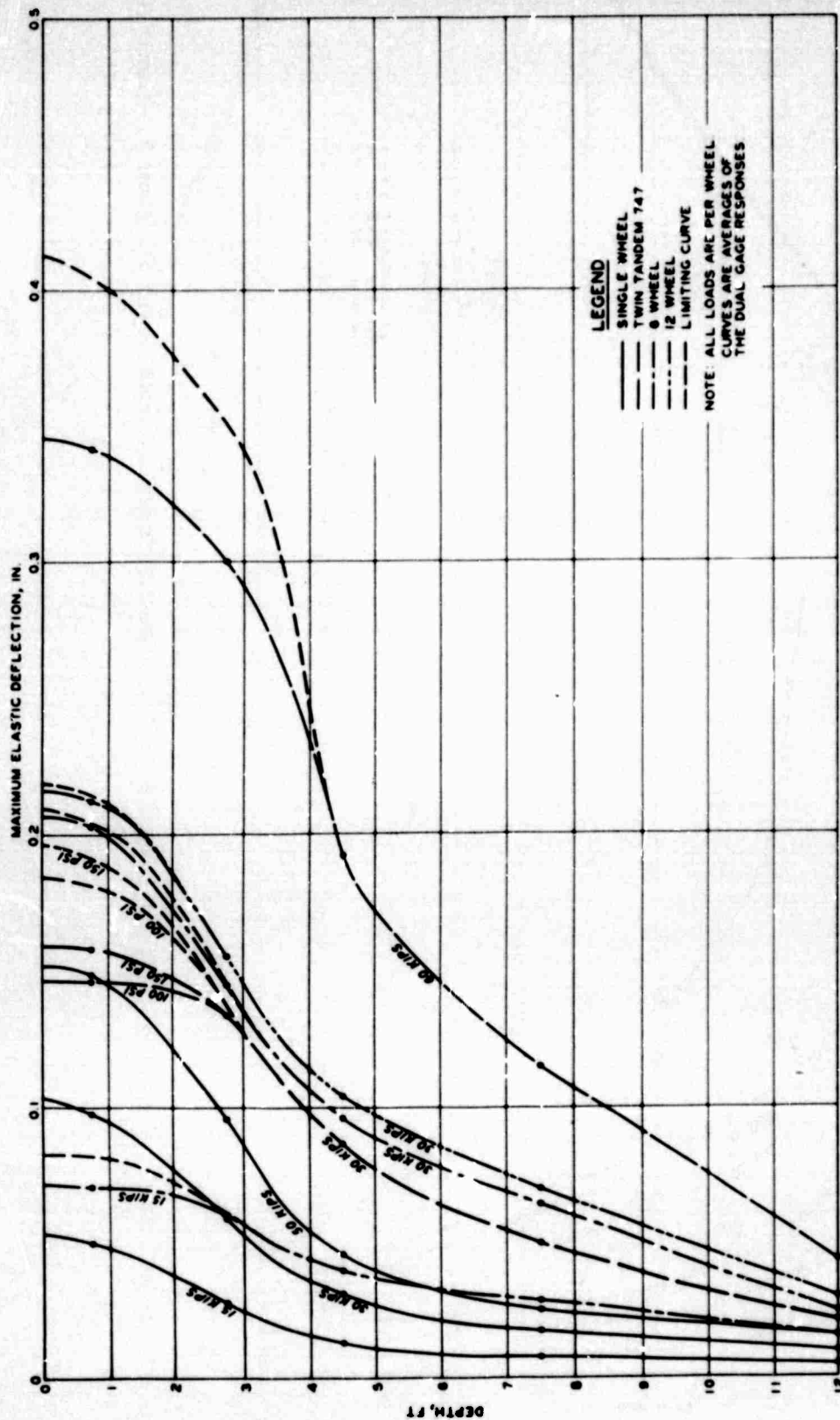


Figure 5. Depth Versus Deflection for Static Load Tests, Assembly Load Point 1, Item 3, Flexible Pavement

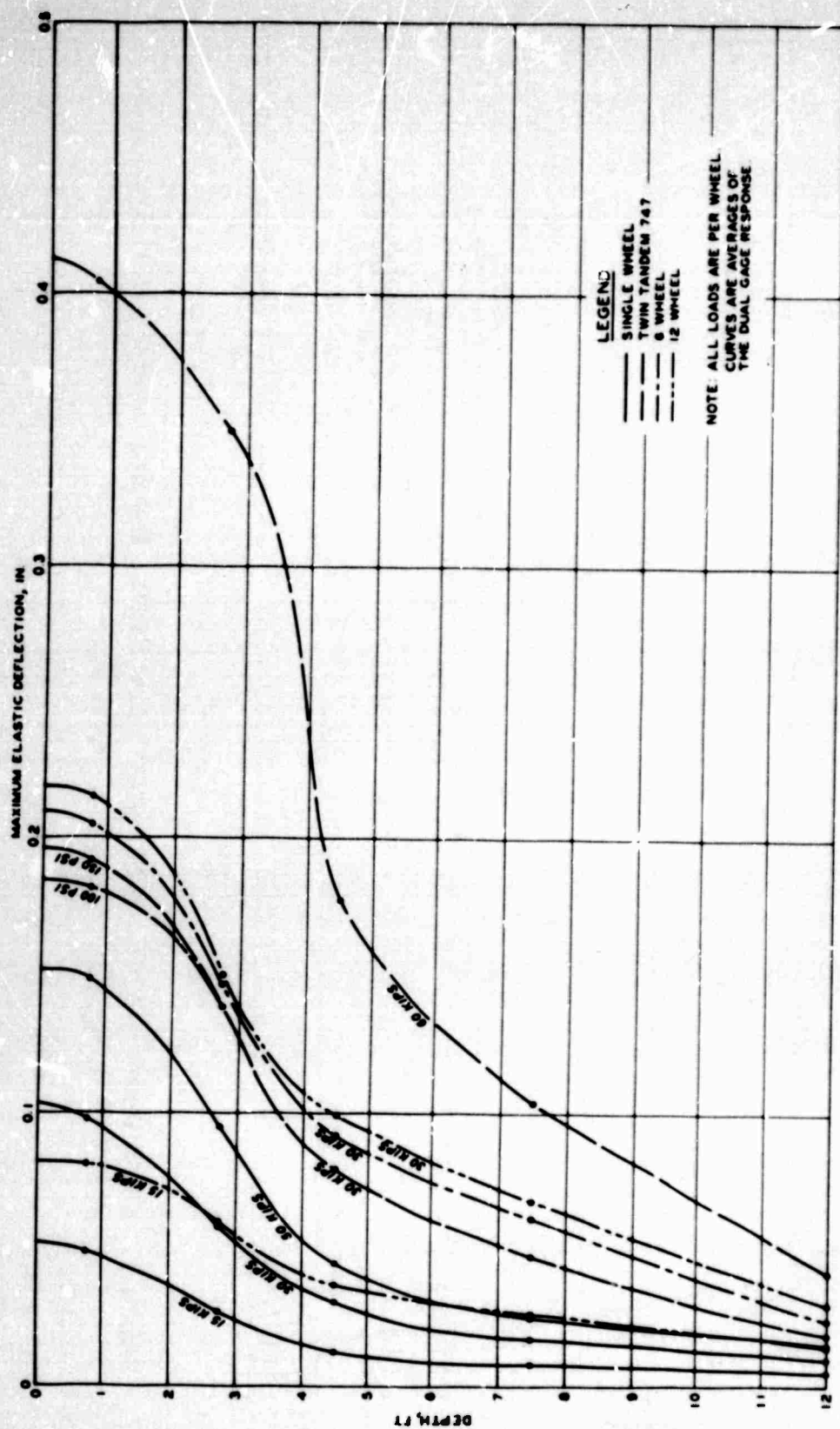
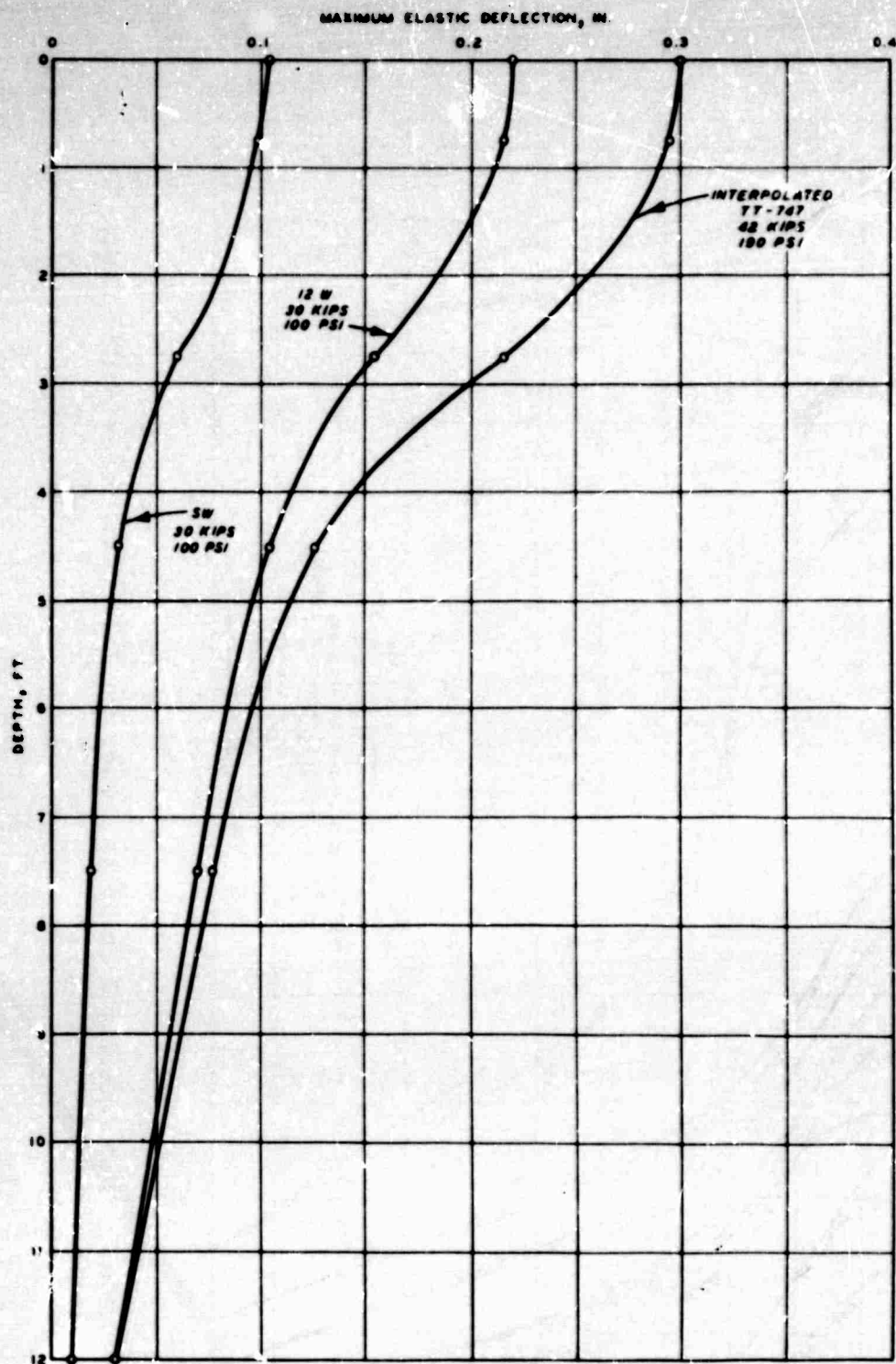


Figure 6. Depth Versus Deflection for Static Load Tests, Assembly Load Point 2, Item 3, Flexible Pavement



NOTE: CURVES ARE AVERAGES
OF GAGE RESPONSES
ALL LOADS ARE PER WHEEL.

Figure 8. Maximum Elastic Deflection Versus Depth, Item 3, Flexible Pavement

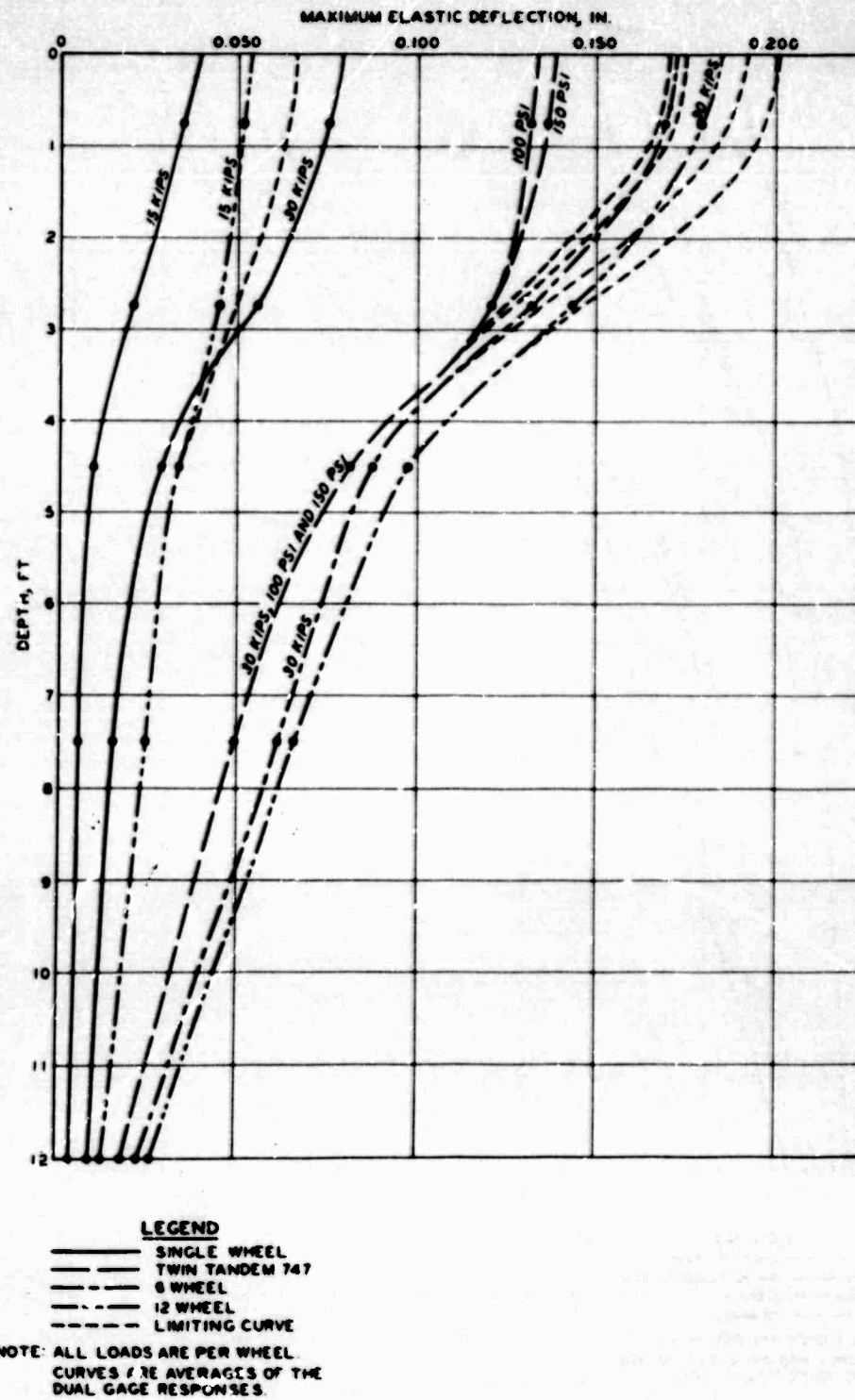
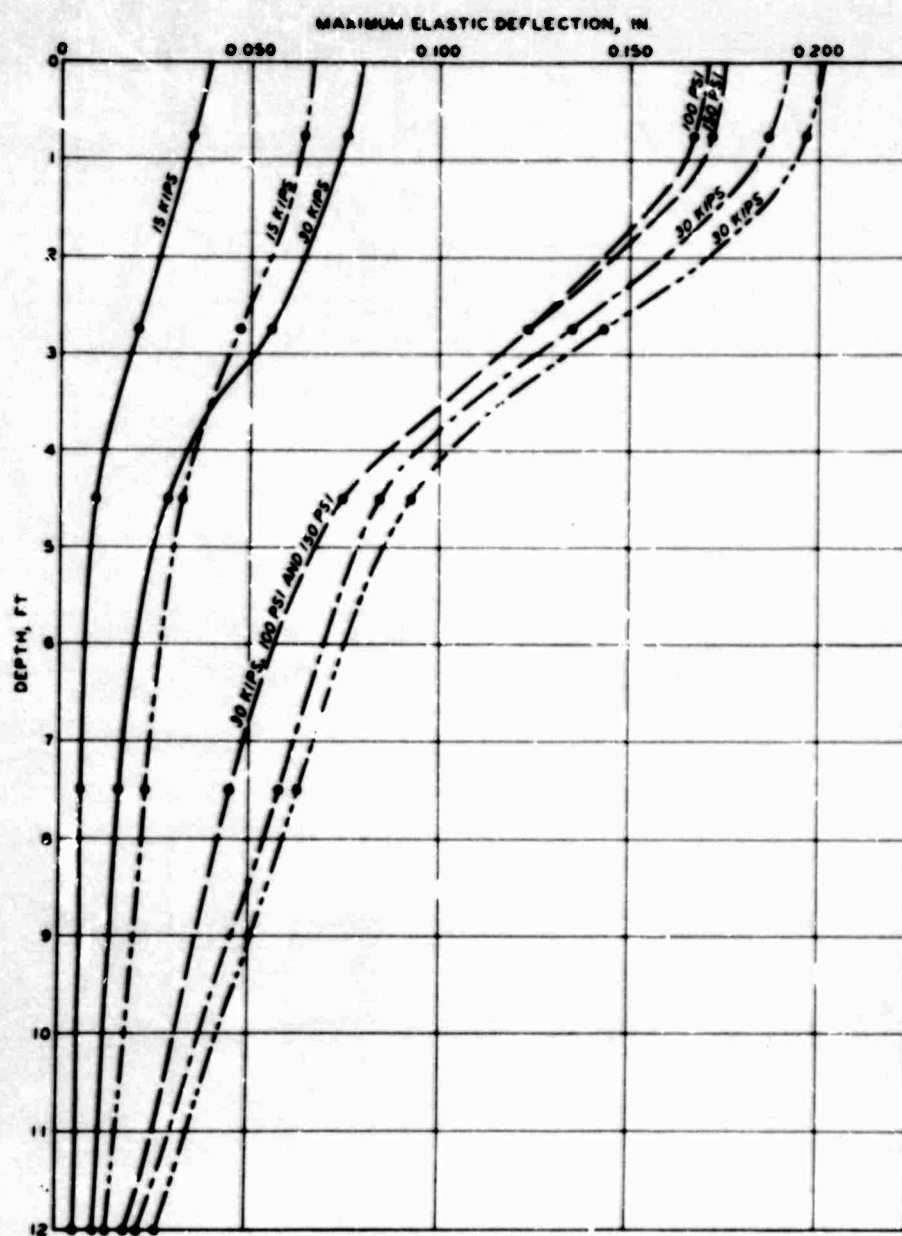


Figure 9. Depth Versus Deflection for Dynamic Load Tests, Assembly Load Point 1, Item 3, Flexible Pavement



LEGEND

- SINGLE WHEEL
- TWIN TANDEM 747
- - - 6 WHEEL
- - - 12 WHEEL

NOTE: ALL LOADS ARE PER WHEEL.
CURVES ARE AVERAGES OF THE
DUAL GAGE RESPONSES.

Figure 10. Depth Versus Deflection for Dynamic Load Tests,
Assembly Load Point 2, Item 3, Flexible Pavement

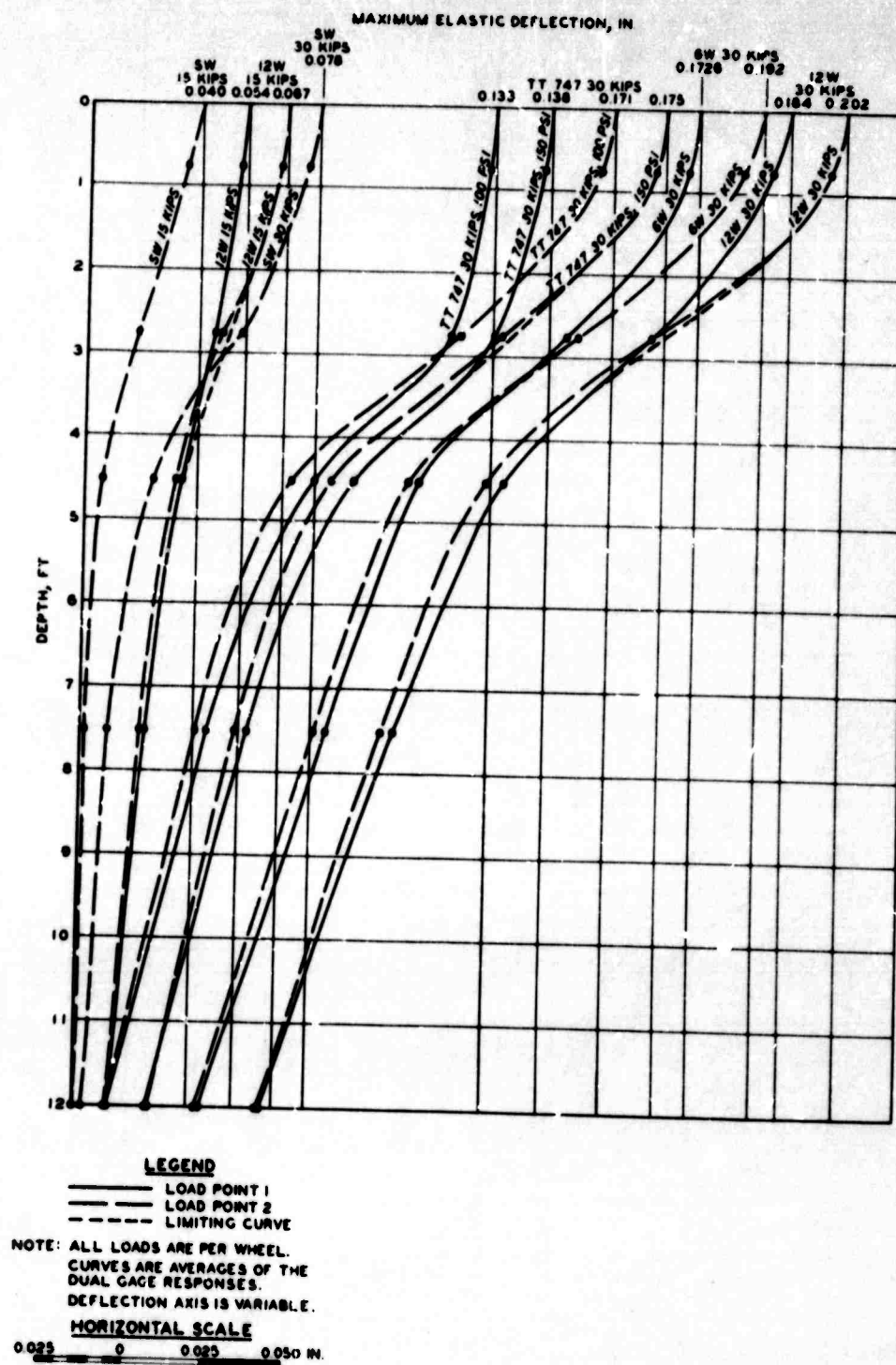


Figure 11. Comparison of Assembly Load Point Curves for Deflection Under Dynamic Loads, Item 3, Flexible Pavement

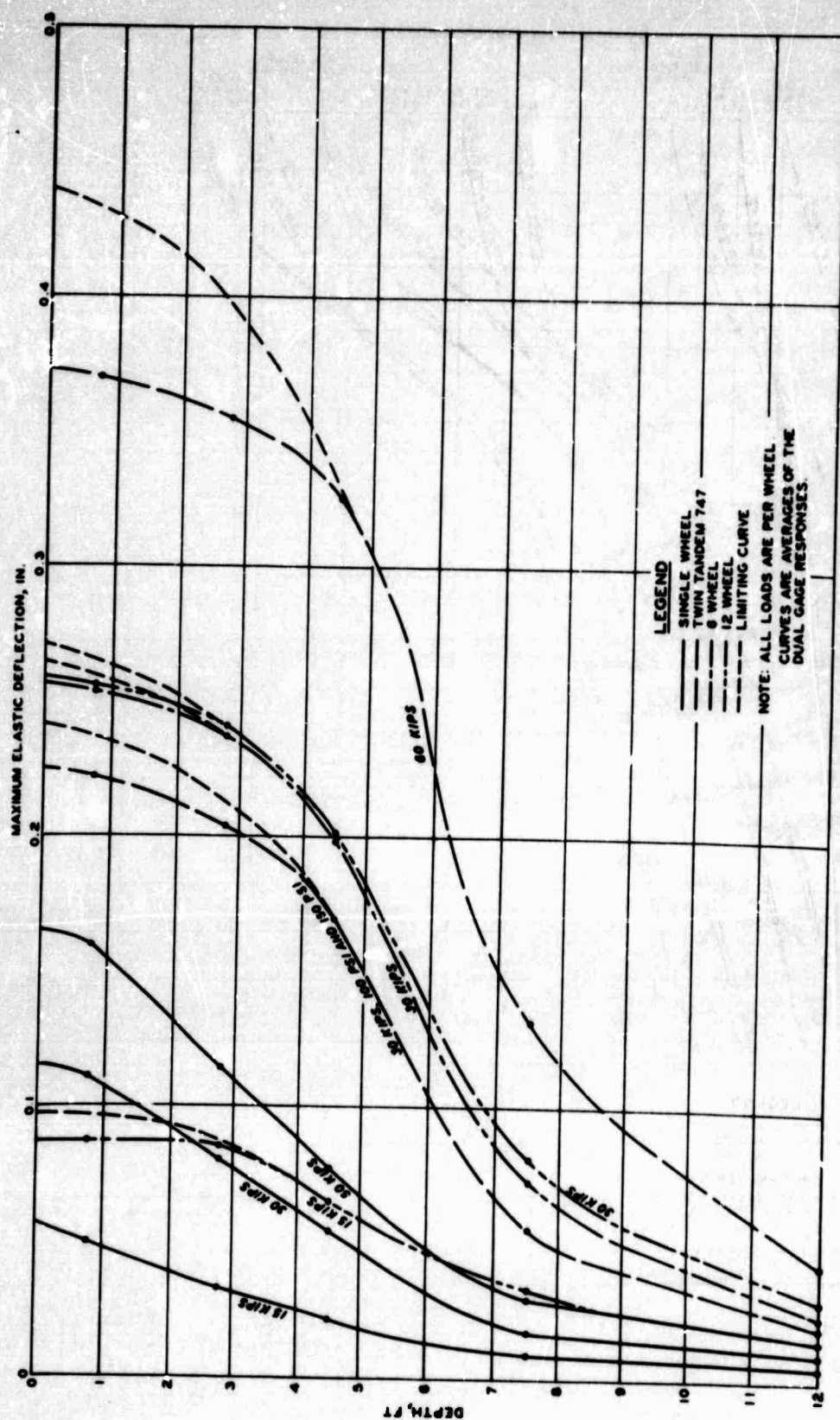


Figure 12. Depth Versus Deflection for Static Load Tests, Assembly Load Point 1, Item 4, Flexible Pavement

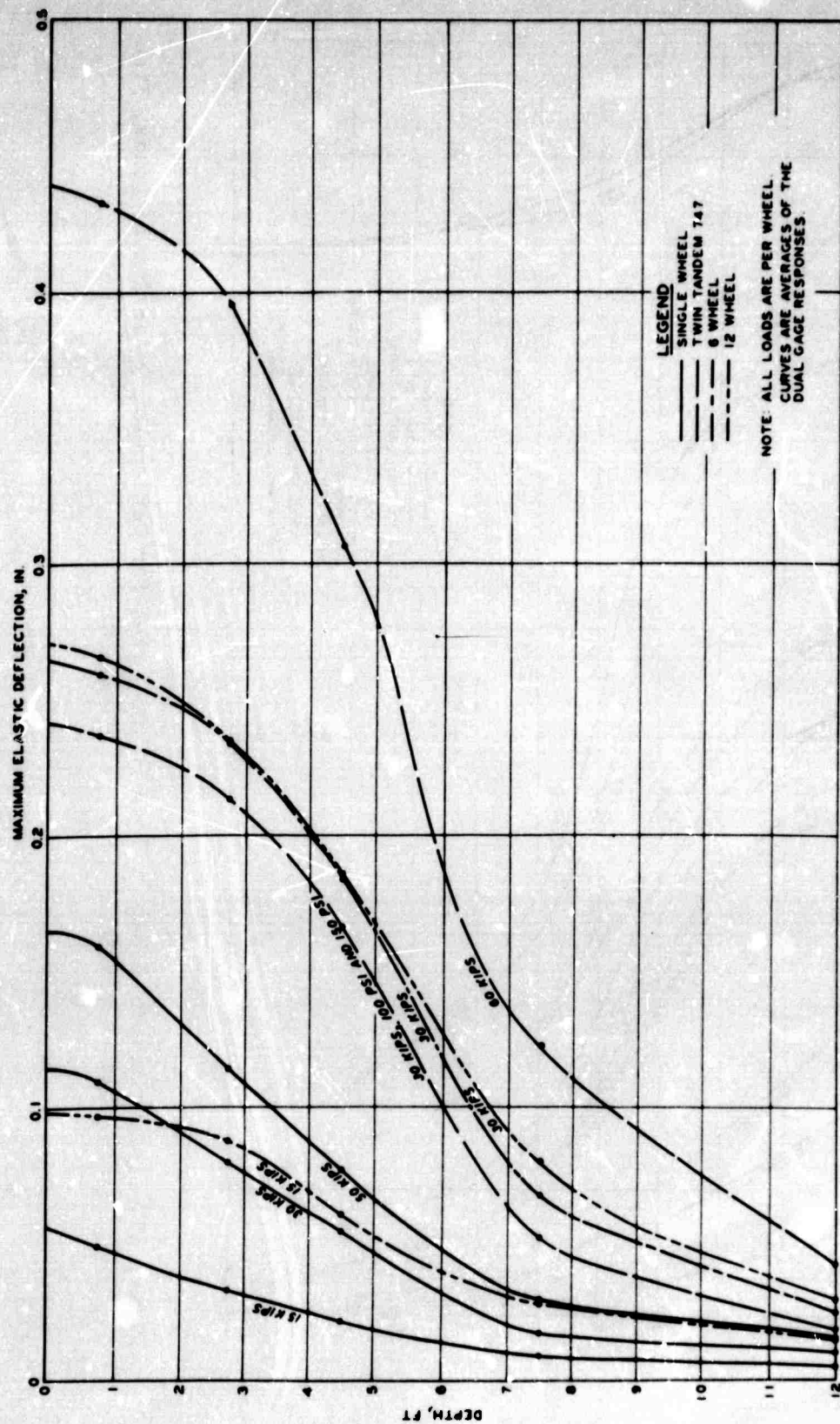


Figure 13. Depth Versus Deflection for Static Load Tests, Assembly Load Point 2, Item 4, Flexible Pavement

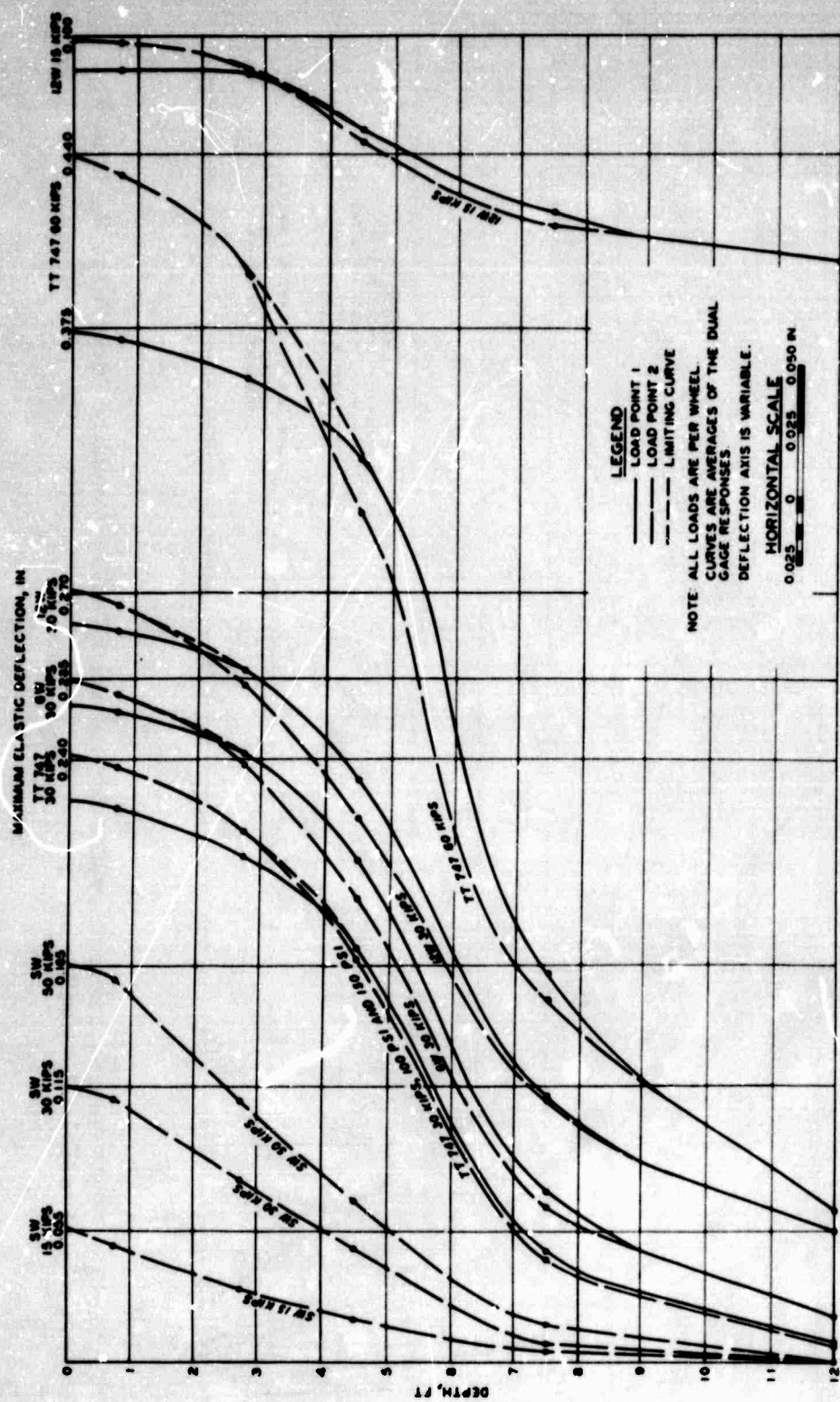
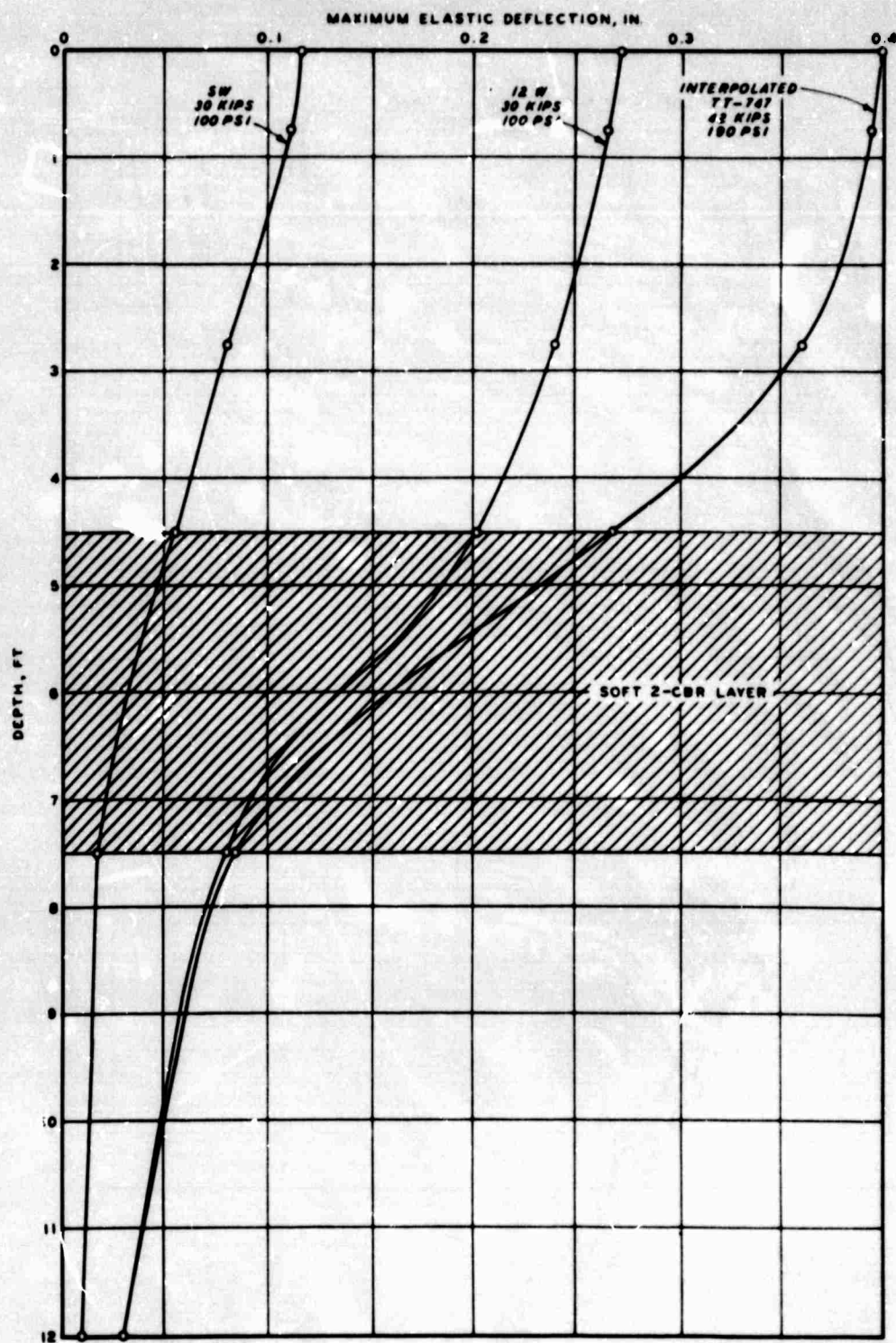


Figure 14. Comparison of Assembly Load Point Curves for Deflection Under Static Loads, Item 4, Flexible Pavement



NOTE: CURVES ARE AVERAGES
OF GAGE RESPONSES.
ALL LOADS ARE PER WHEEL.

Figure 15. Maximum Elastic Deflection Versus Depth, Item 4,
Flexible Pavement

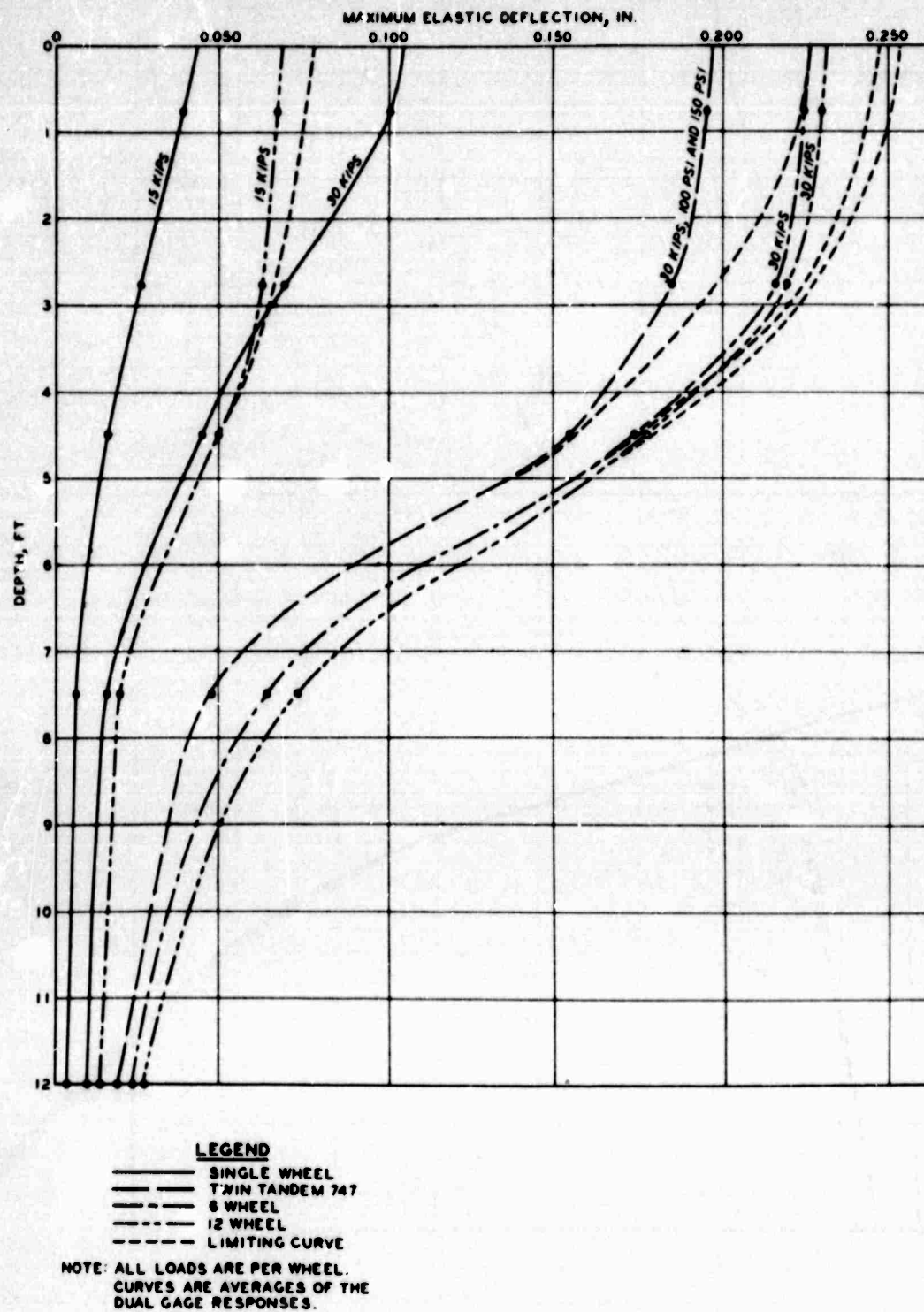


Figure 16. Depth Versus Deflection for Dynamic Load Tests, Assembly Load Point 1, Item 4, Flexible Pavement

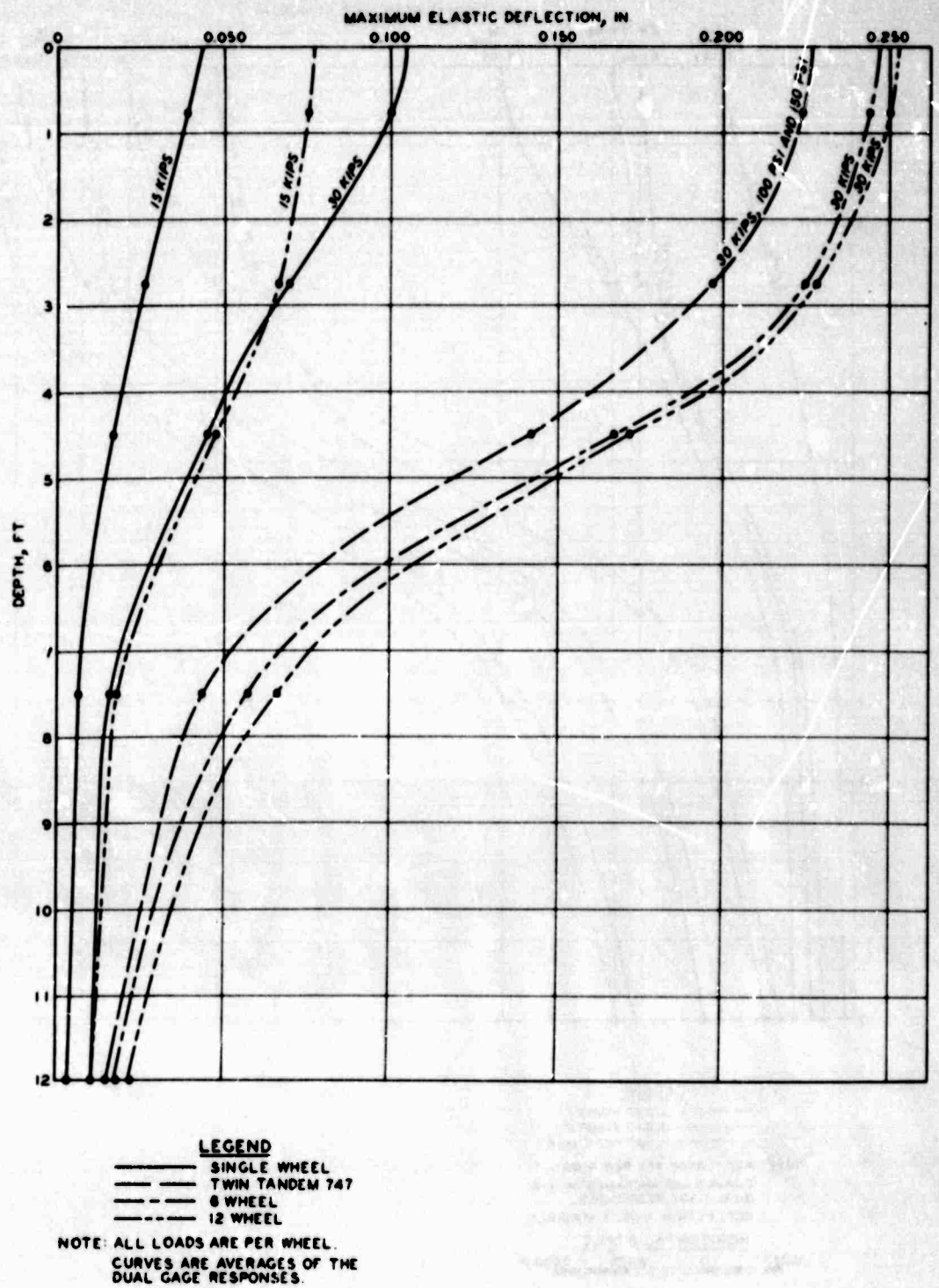


Figure 17. Depth Versus Deflection for Dynamic Load Tests, Assembly Load Point 2, Item 4, Flexible Pavement

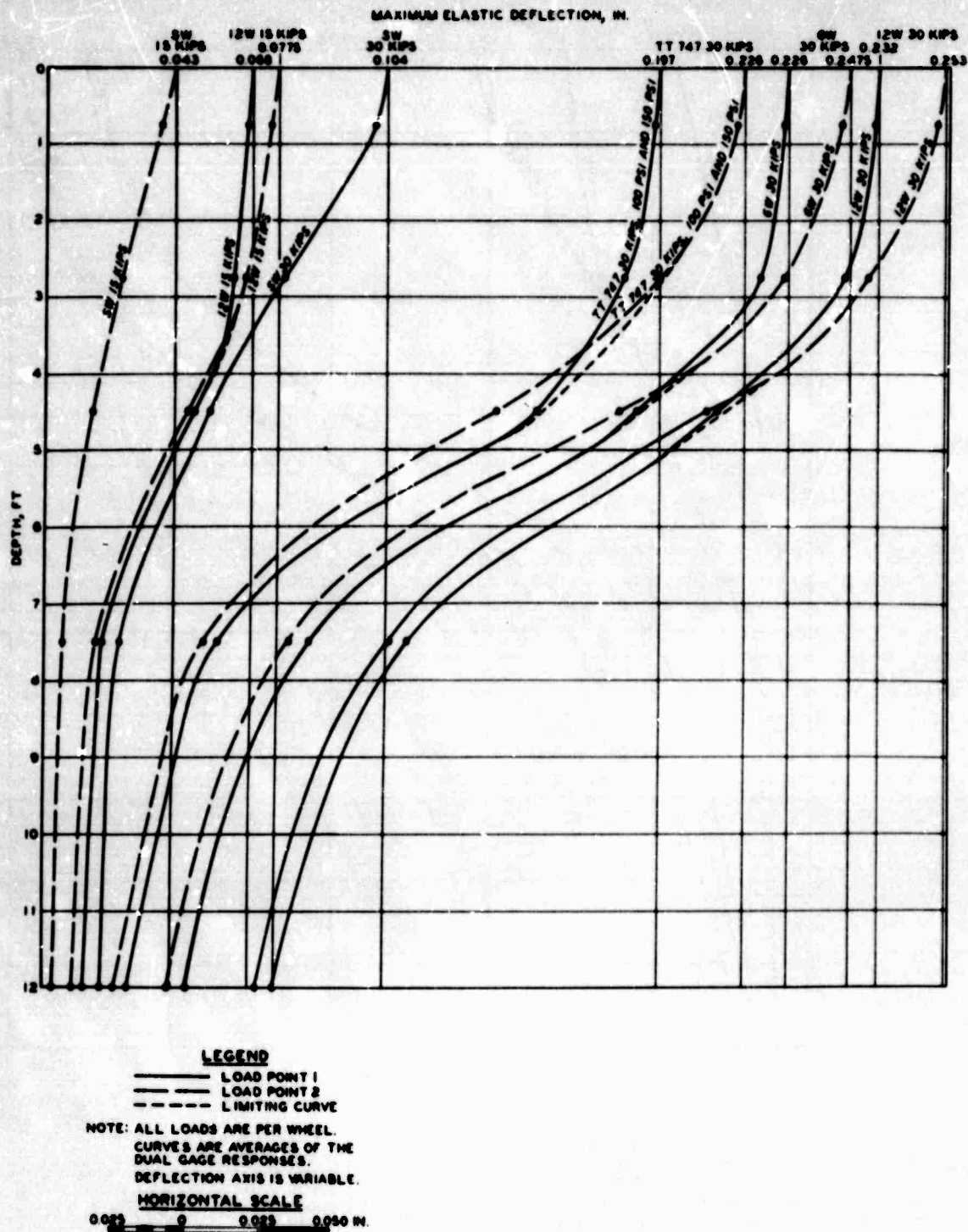


Figure 18. Comparison of Assembly Load Point Curves for Deflection Under Dynamic Loads, Item 4, Flexible Pavement

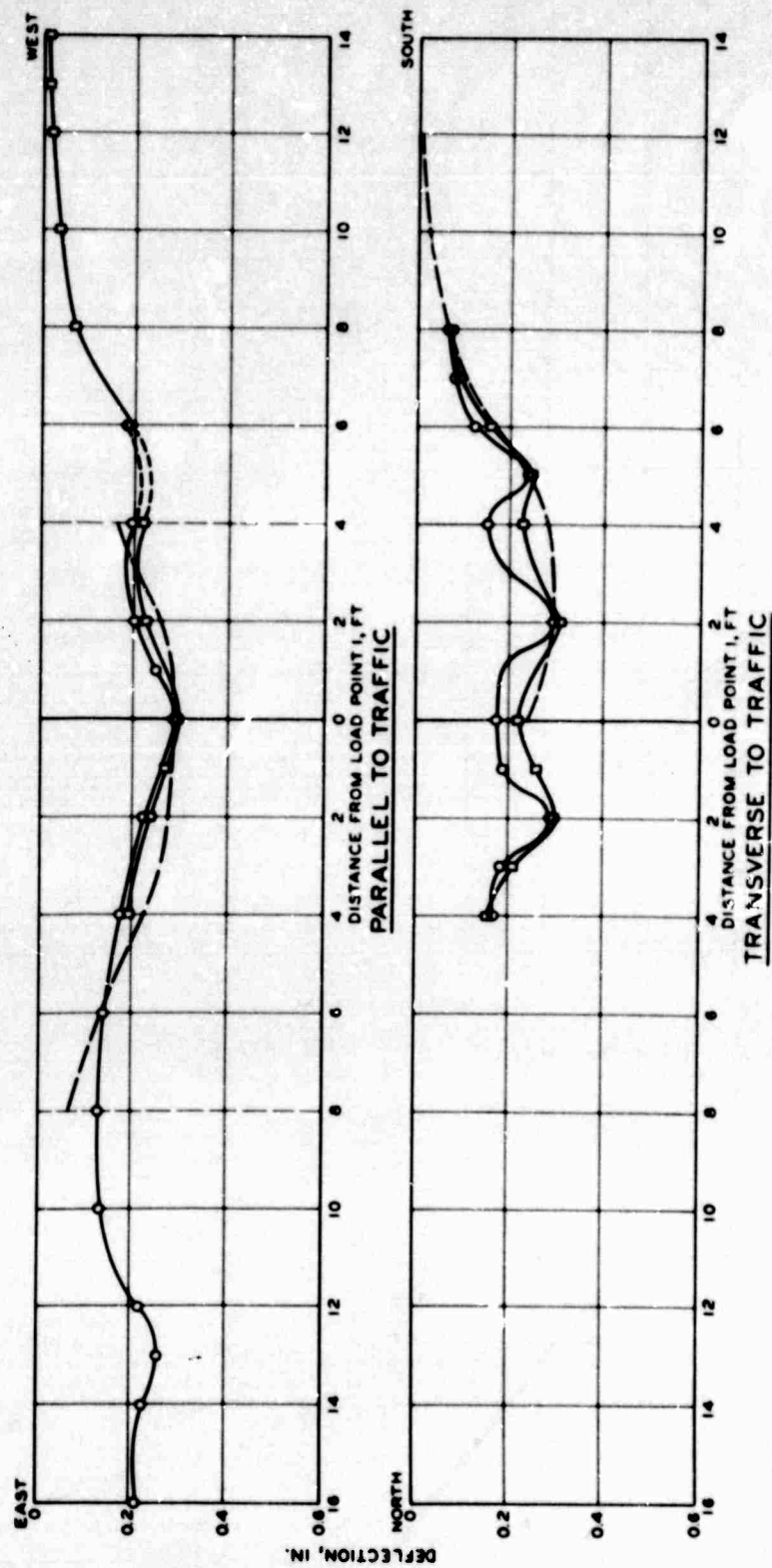


Figure 19. Surface Deflection Basins, 12-Wheel, 360-kip Load (100-psi Tire Pressure), Flexible Pavement Tests

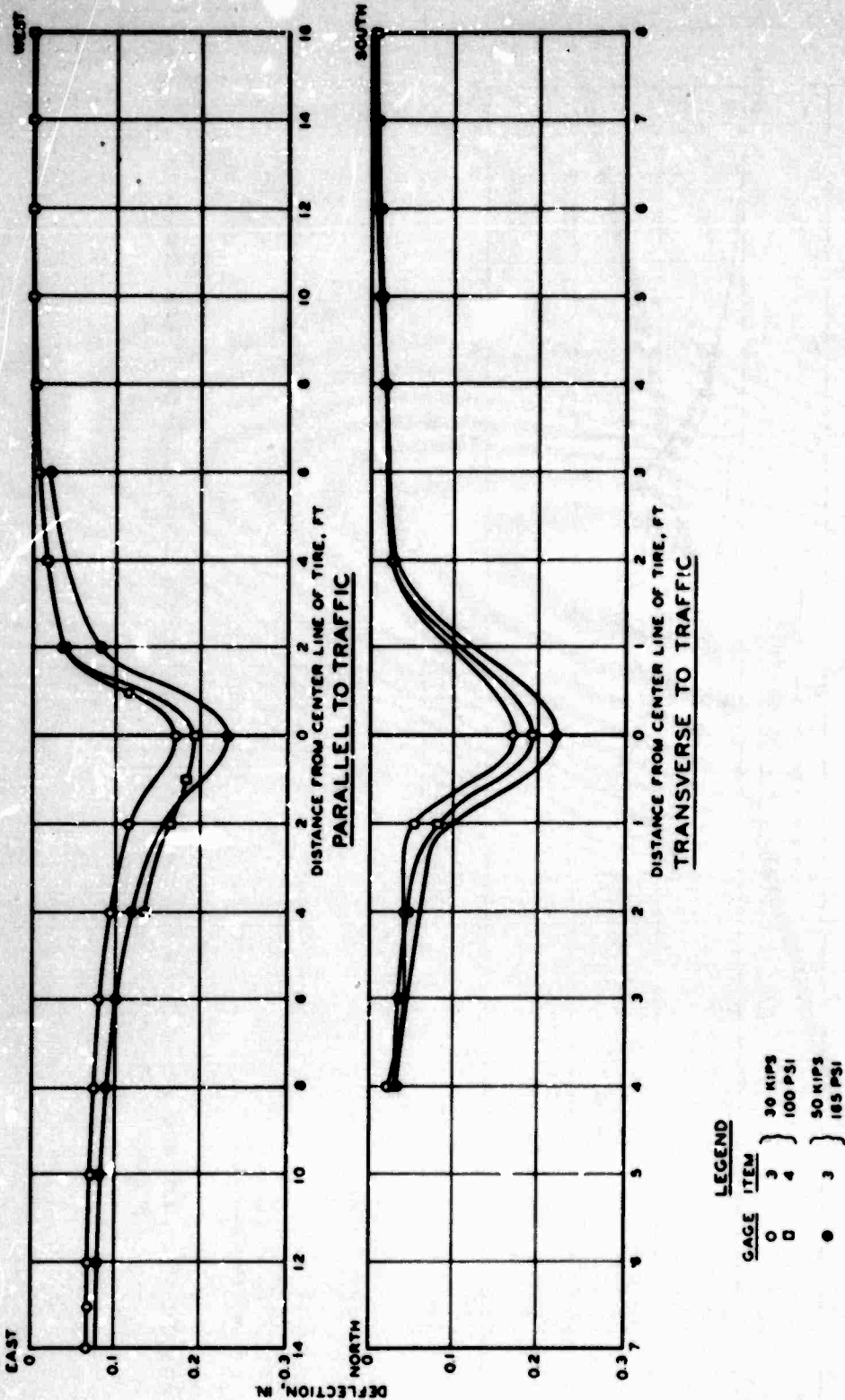


Figure 20. Surface Deflection Basins, Single-Wheel Flexible Pavement Tests

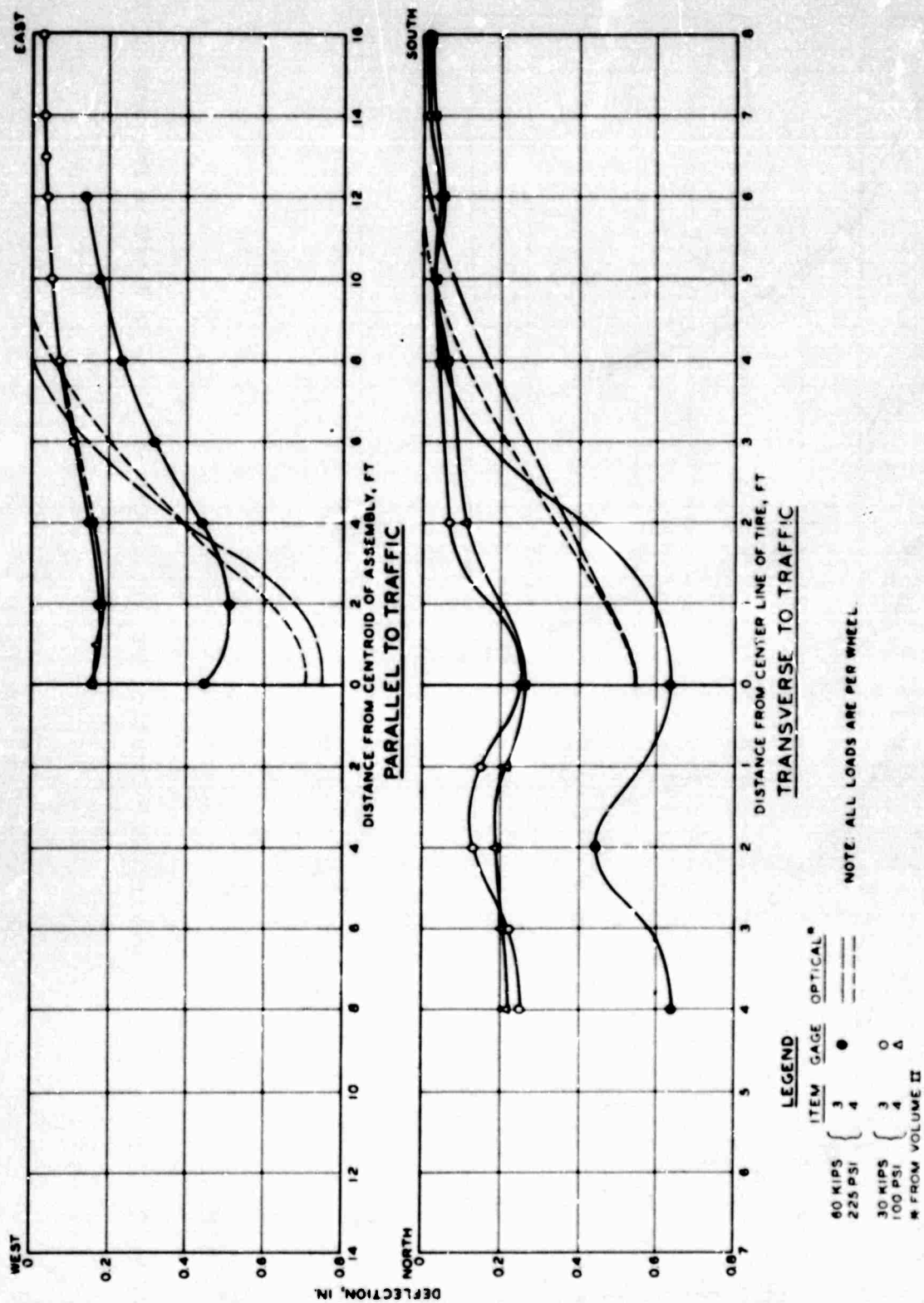


Figure 21. Surface Deflection Basins, Twin-Tandem Flexible Pavement Tests

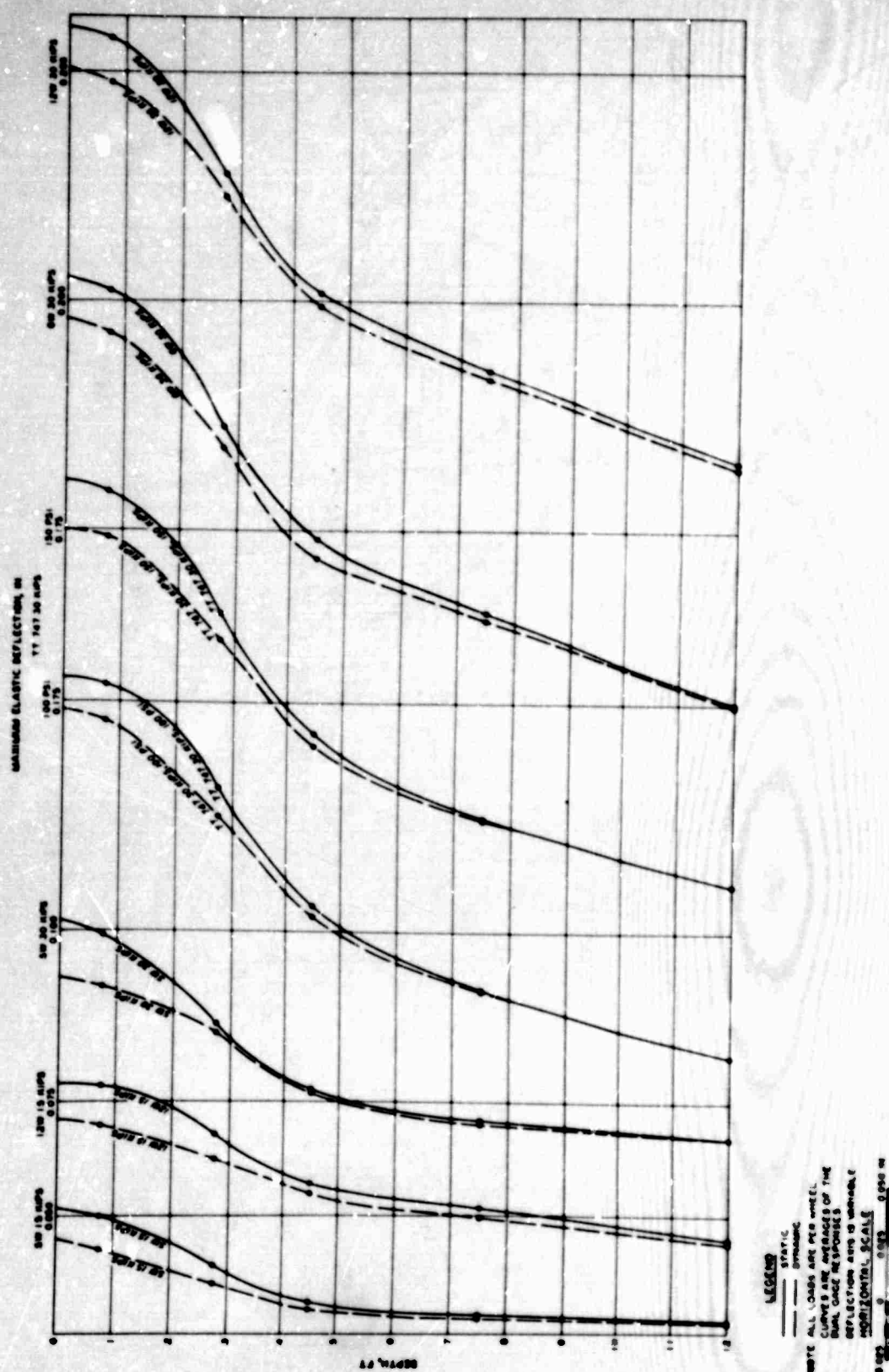


Figure 22. Static Versus Dynamic Load Limiting Deflection Curves, Item 3, Flexible Pavement

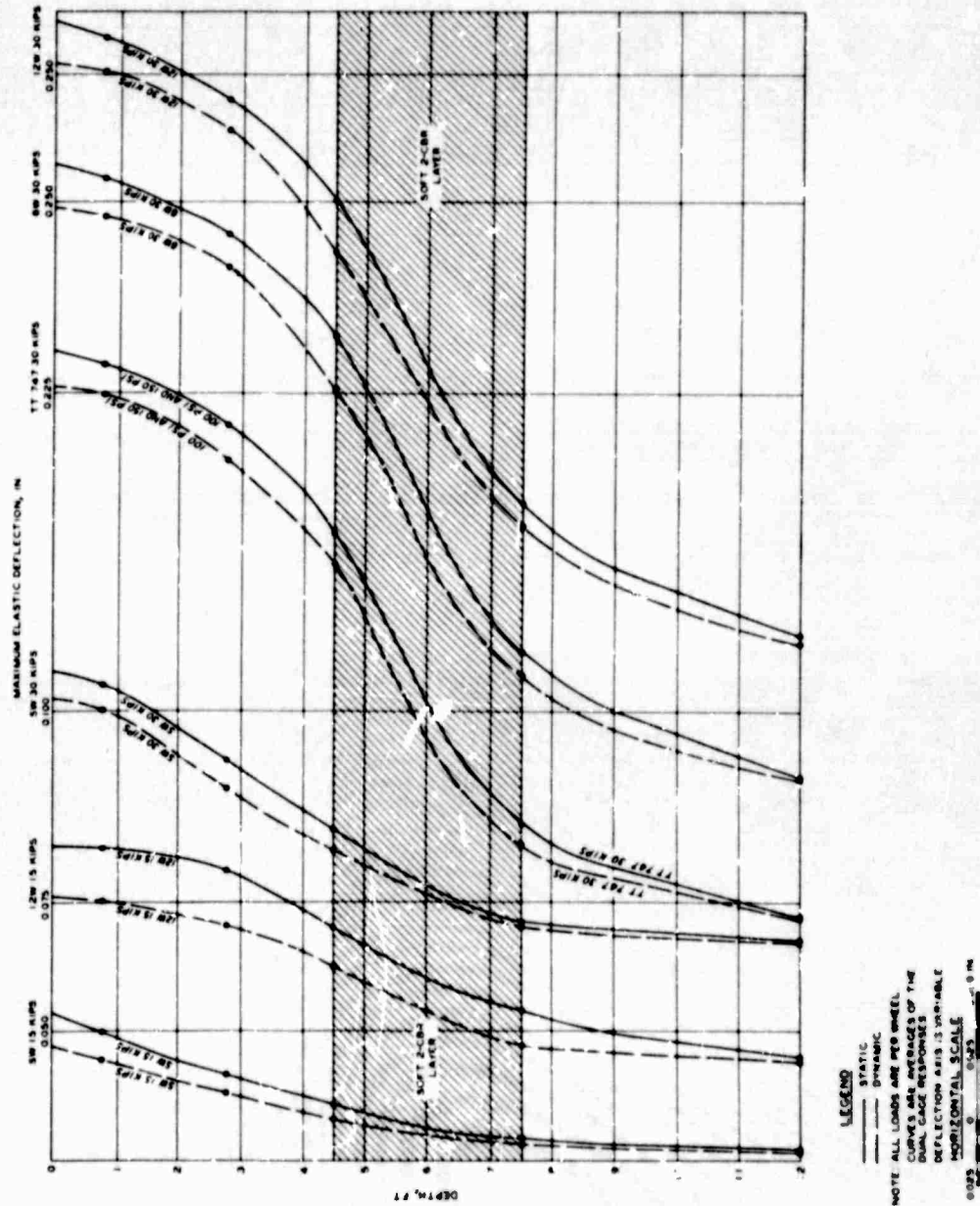


Figure 23. Static Versus Dynamic Load Limiting Deflection Curves, Item 4, Flexible Pavement

NOTE: Figure 24 is a folded sheet and is enclosed at the back of this volume.

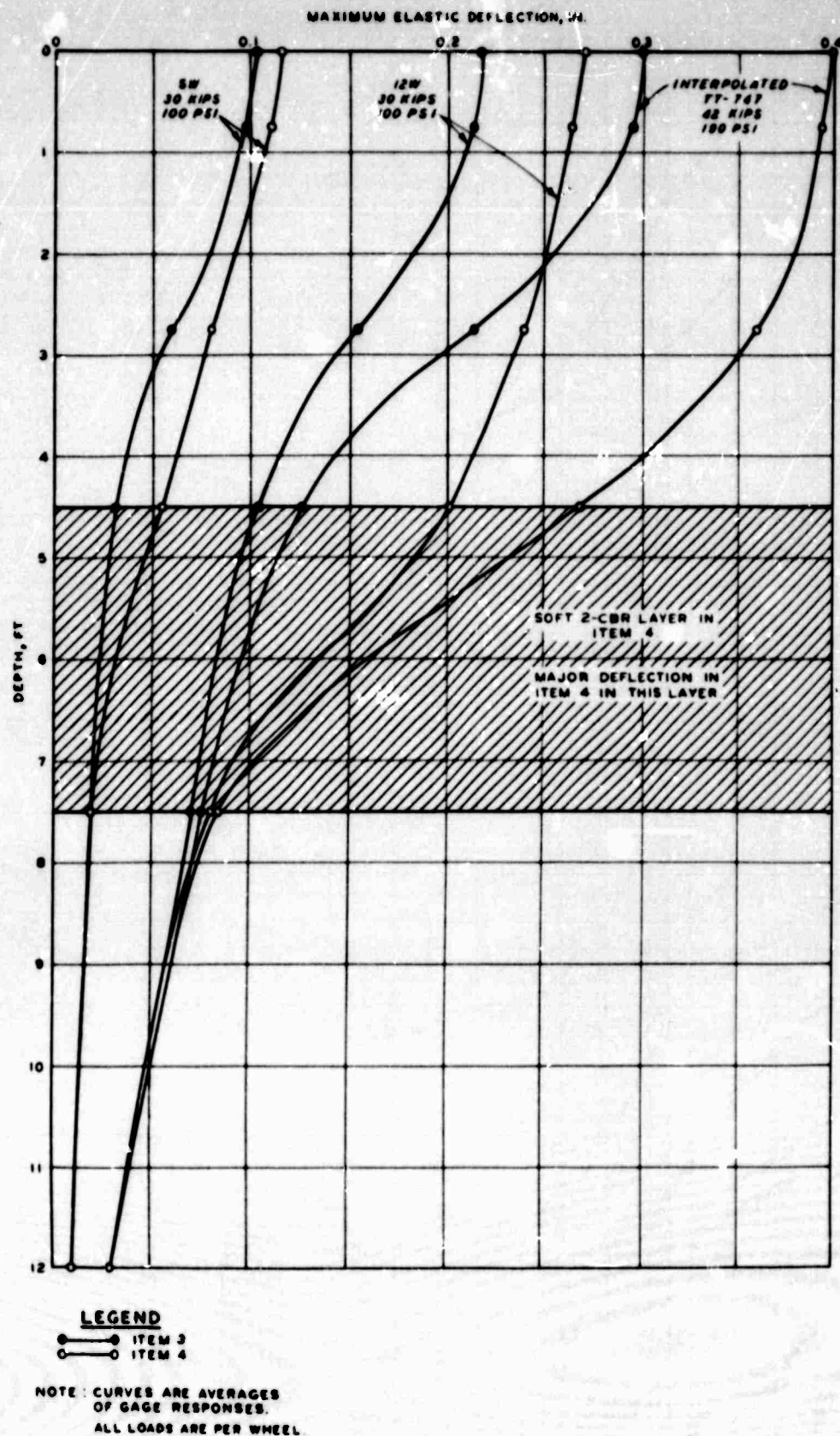


Figure 25. Comparison of Maximum Elastic Deflection Versus Depth, Items 3 and 4, Flexible Pavement Tests

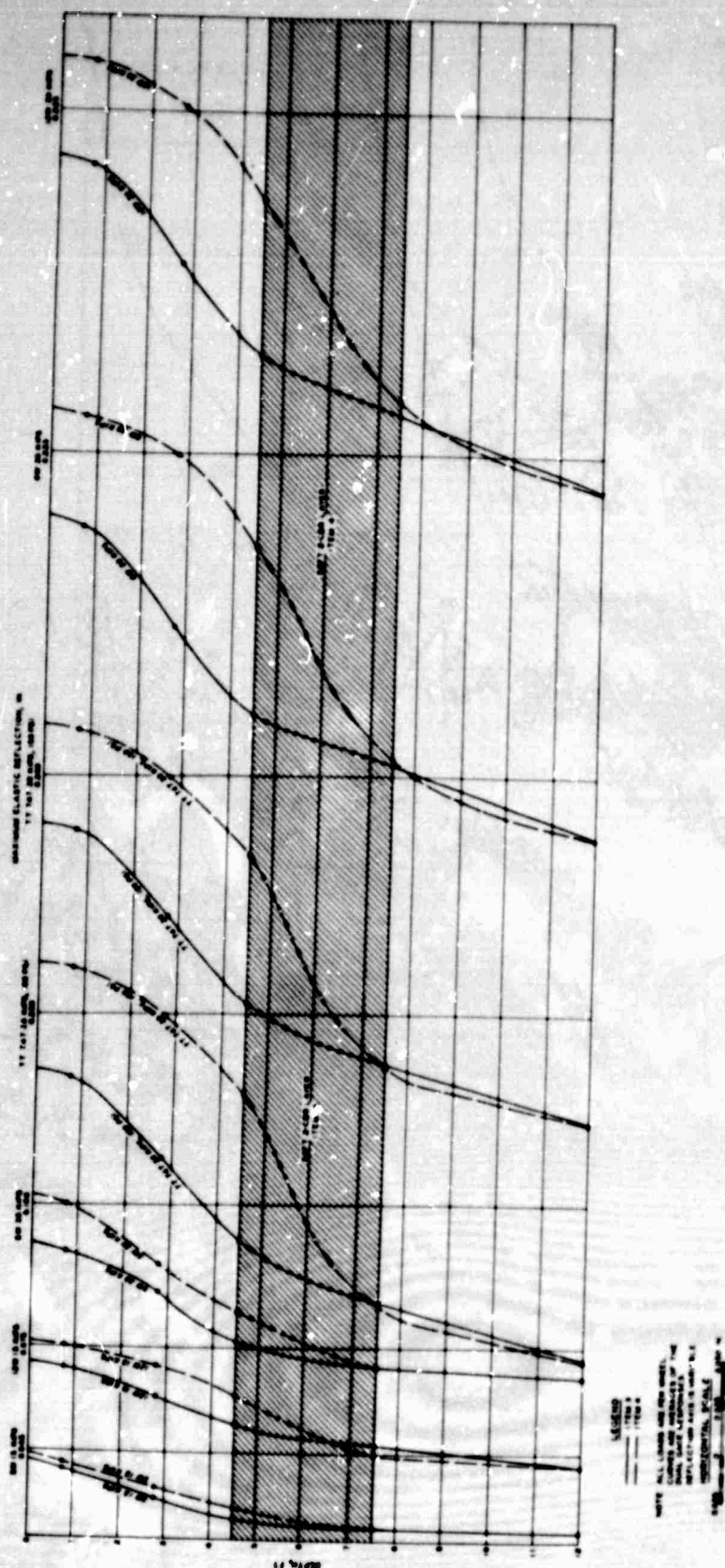
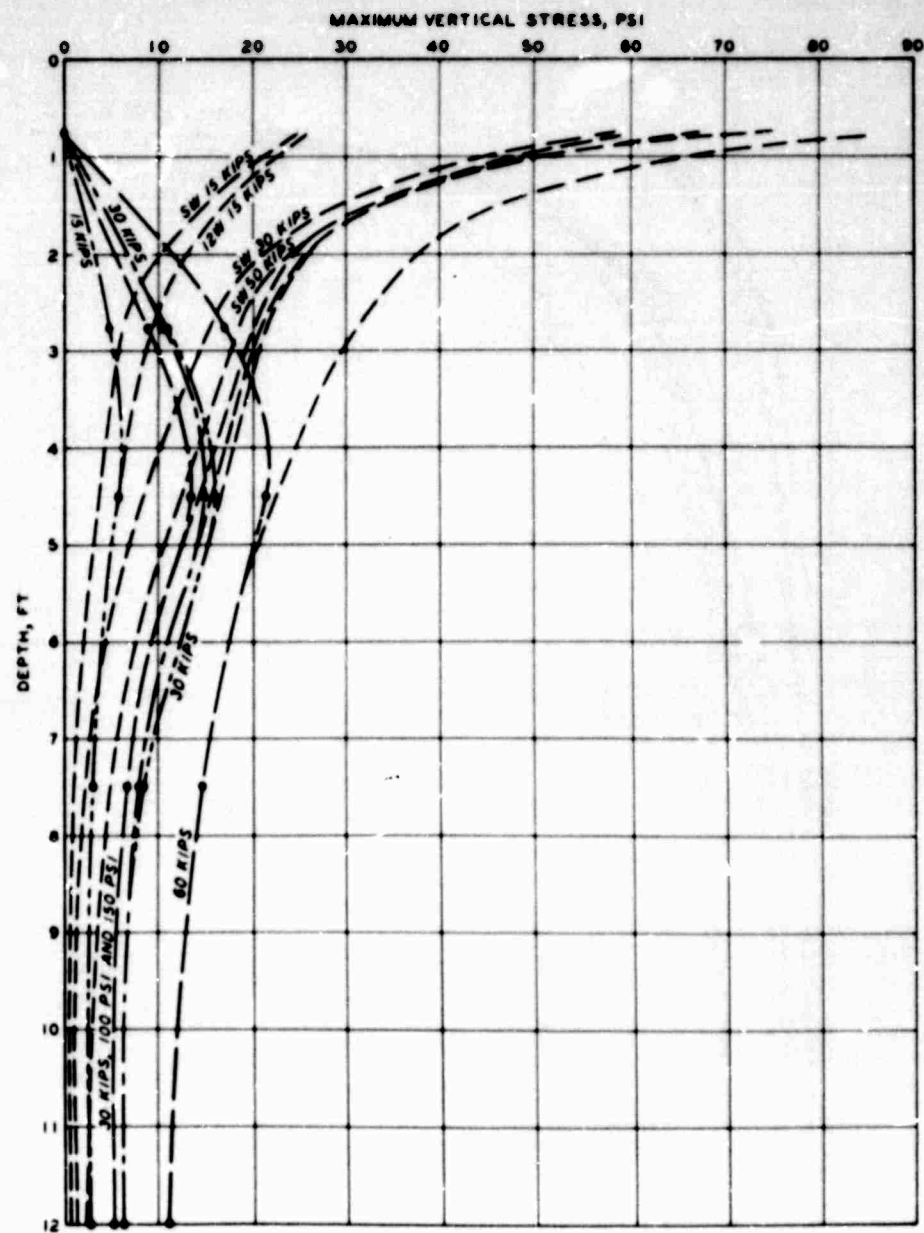


Figure 26. Item 3 Versus Item 4 Limiting Deflection Curves, Dynamic Load Flexible Pavement Tests

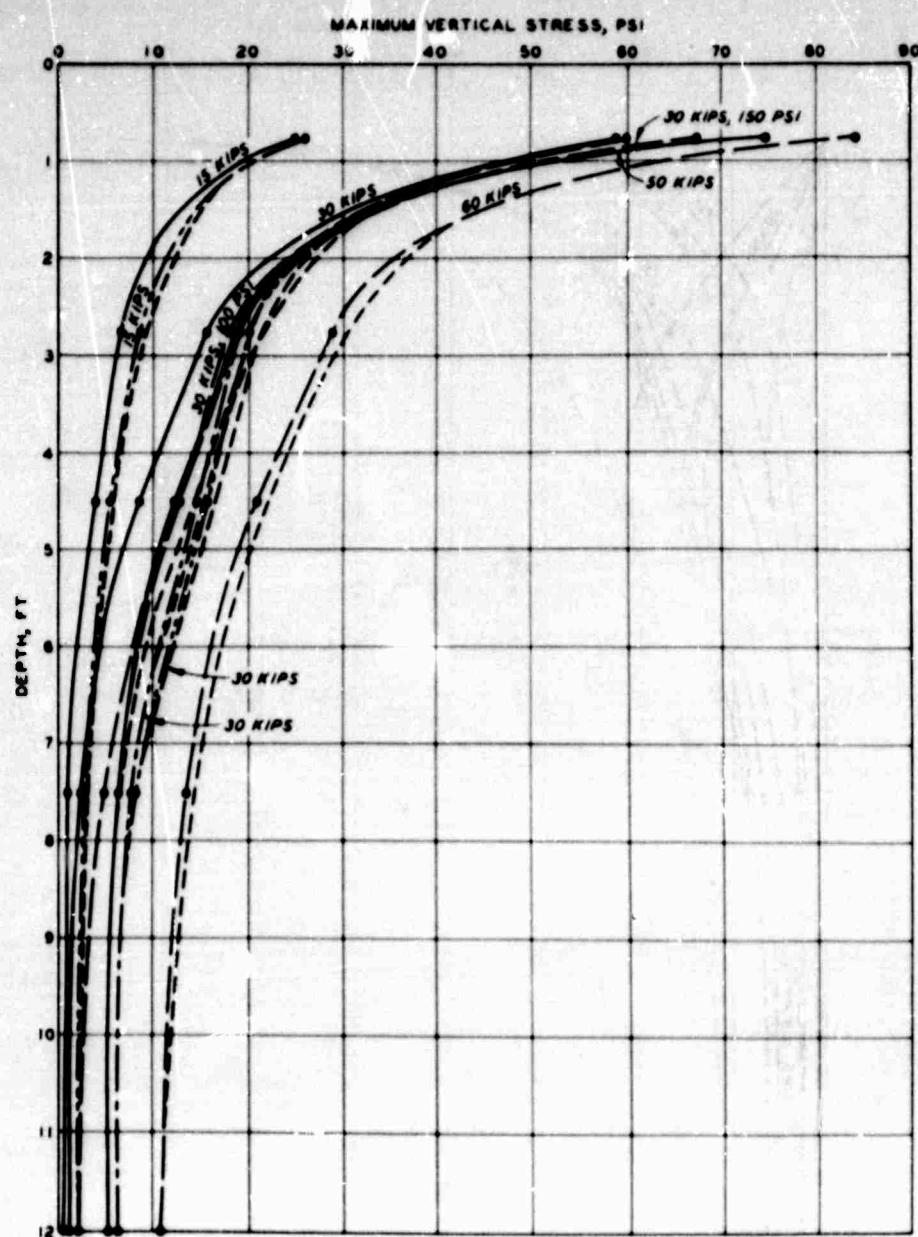


LEGEND

- TWIN TANDEM 747
- - - 6 WHEEL
- . - 12 WHEEL
- ... LIMITING CURVE

NOTE: ALL LOADS ARE PER WHEEL
CURVES ARE AVERAGES OF THE
DUAL GAGE RESPONSES

Figure 27. Depth Versus Vertical Stress for Static Load Tests,
Assembly Load Point 1, Item 3, Flexible Pavement



LEGEND

- SINGLE WHEEL
- TWIN TANDEM 747
- 8 WHEEL
- 12 WHEEL
- LIMITING CURVE

NOTE: ALL LOADS ARE PER WHEEL.
CURVES ARE AVERAGES OF THE
DUAL GAGE RESPONSES.

Figure 28. Depth Versus Vertical Stress for Static Load Tests,
Assembly Load Point 2, Item 3, Flexible Pavement

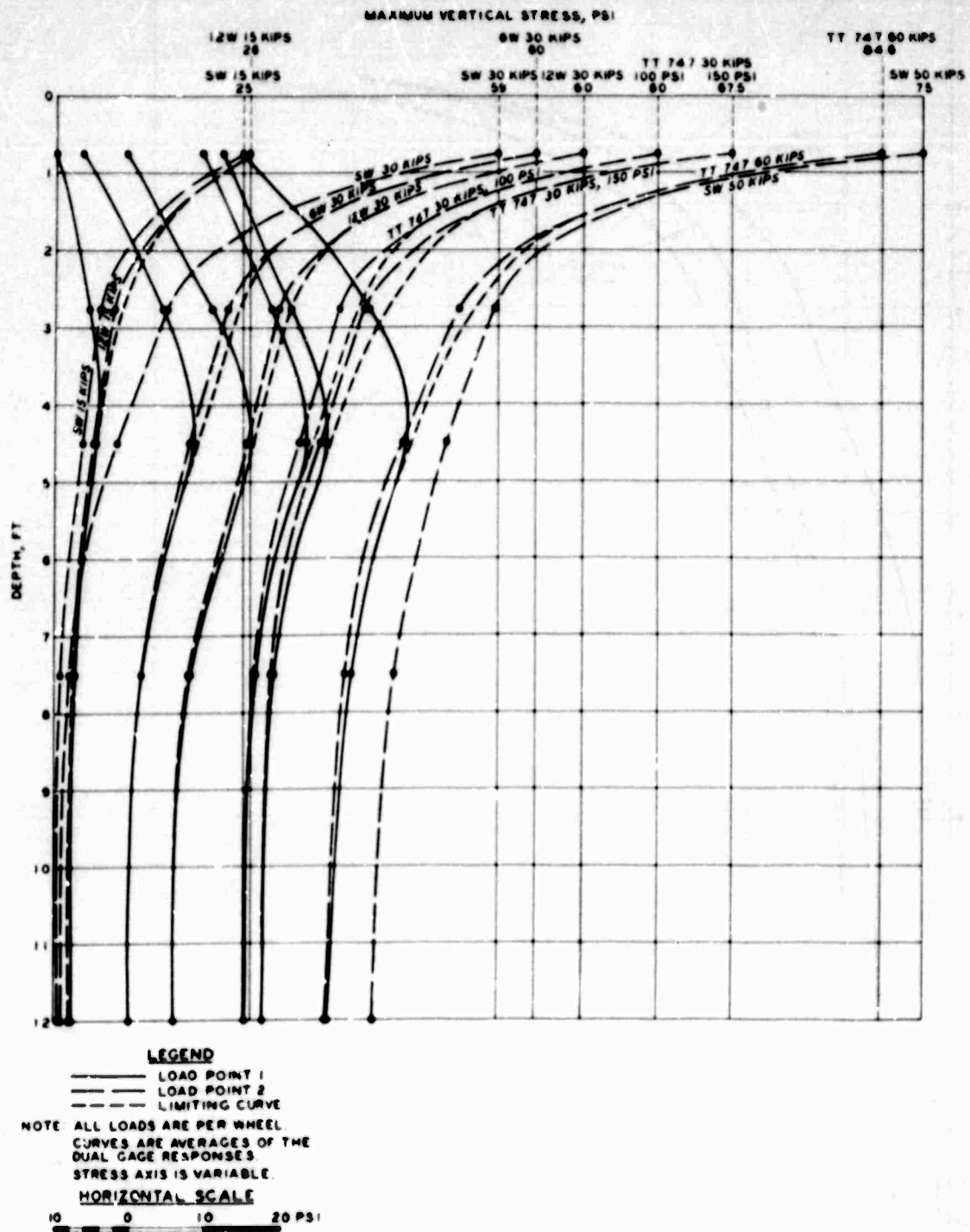
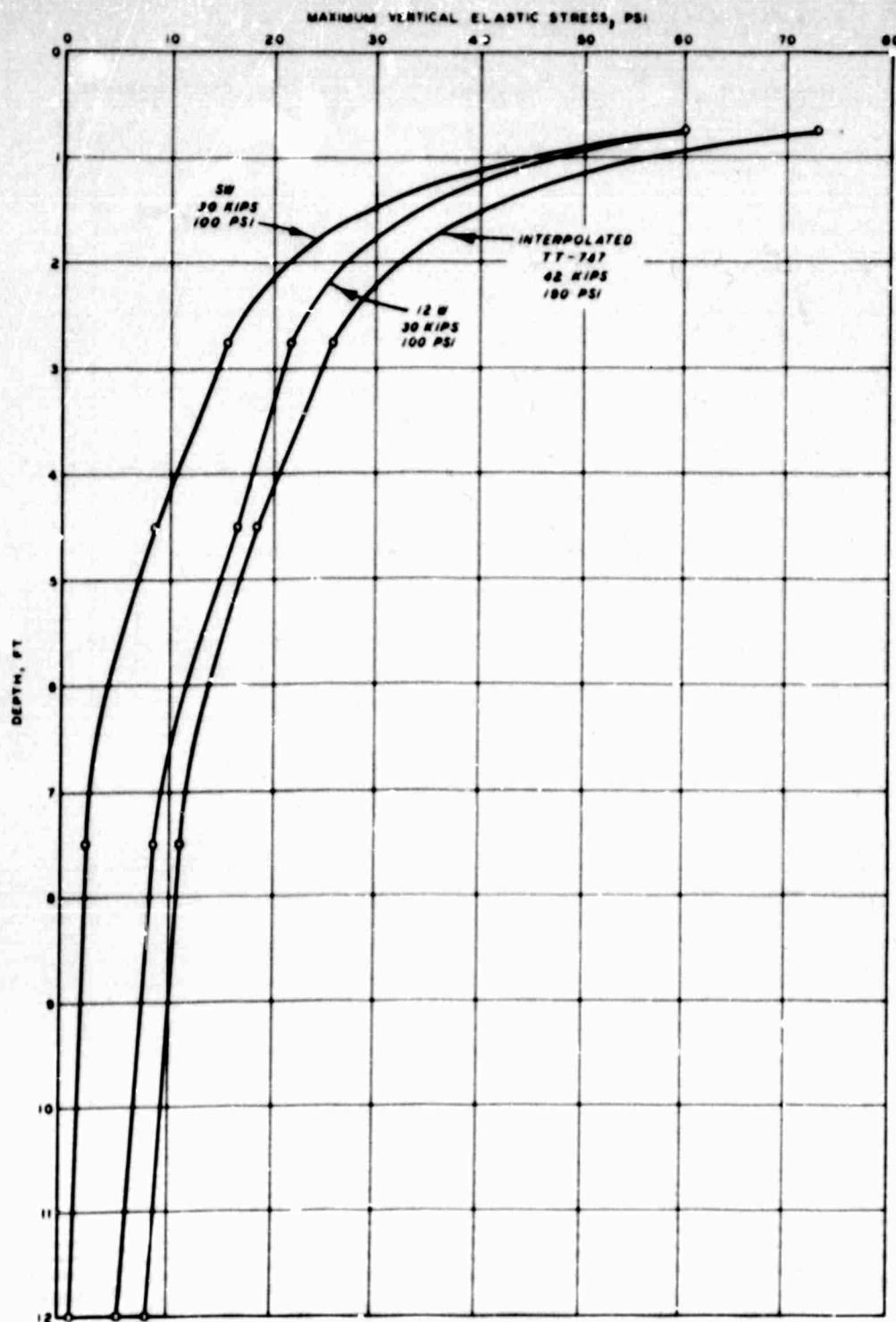
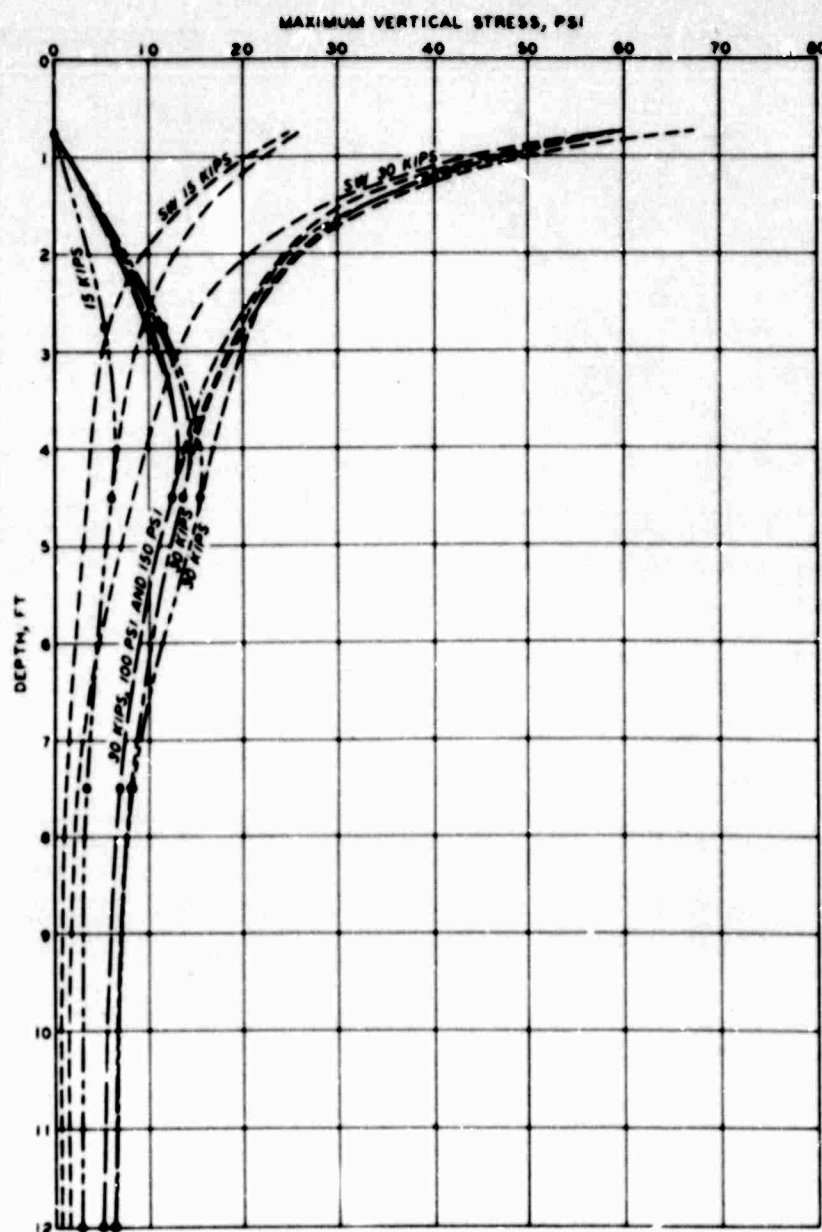


Figure 29. Comparison of Assembly Load Point Curves for Vertical Stress Under Static Loads, Item 3, Flexible Pavement



NOTE: CURVES ARE AVERAGES
OF GAGE RESPONSES.
ALL LOADS ARE PER WHEEL

Figure 30. Elastic Stress Versus Depth, Item 3, Flexible Pavement

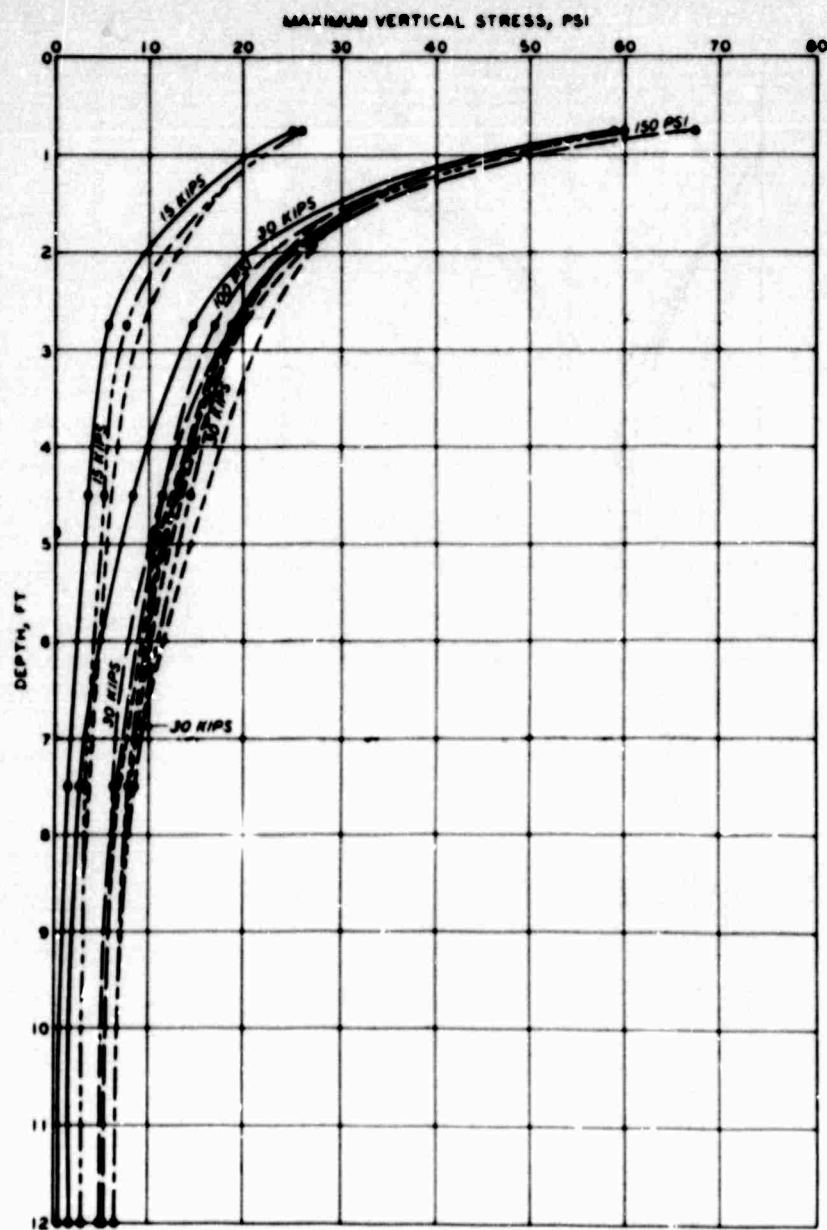


LEGEND

- TWIN TANDEM 747
- - - 8 WHEEL
- - - 12 WHEEL
- - - LIMITING CURVE

NOTE: ALL LOADS ARE PER WHEEL.
CURVES ARE AVERAGES OF THE
DUAL GAGE RESPONSES.

Figure 31. Depth Versus Vertical Stress for Dynamic Load Tests, Assembly Load Point 1, Item 3, Flexible Pavement

**LEGEND**

- SINGLE WHEEL
- TWIN TANDEM 747
- 8 WHEEL
- 12 WHEEL
- - - LIMITING CURVE

NOTE: ALL LOADS ARE PER WHEEL.
CURVES ARE AVERAGES OF THE
DUAL GAGE RESPONSES.

Figure 32. Depth Versus Vertical Stress for Dynamic Load Tests, Assembly Load Point 2, Item 3, Flexible Pavement

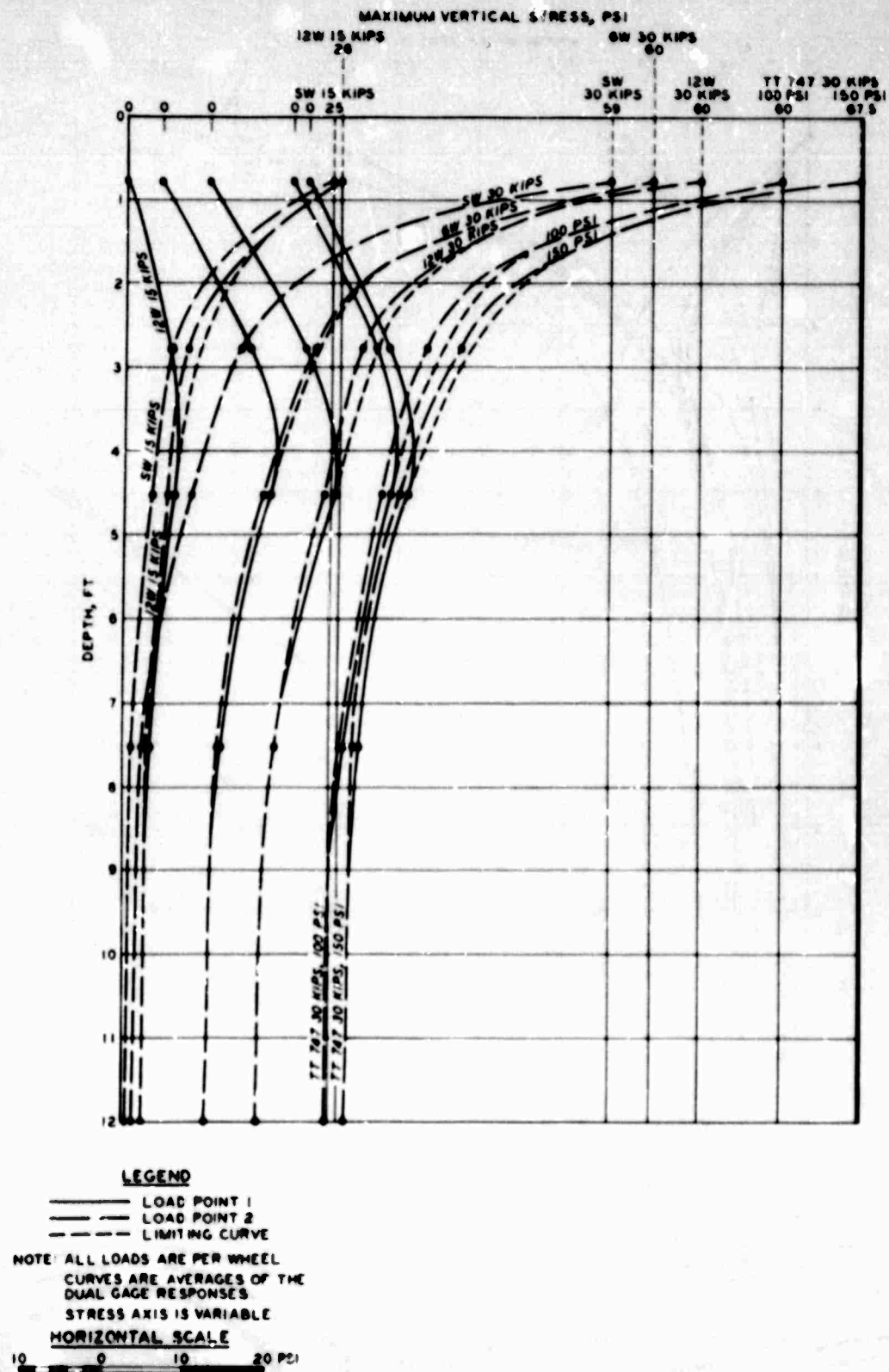
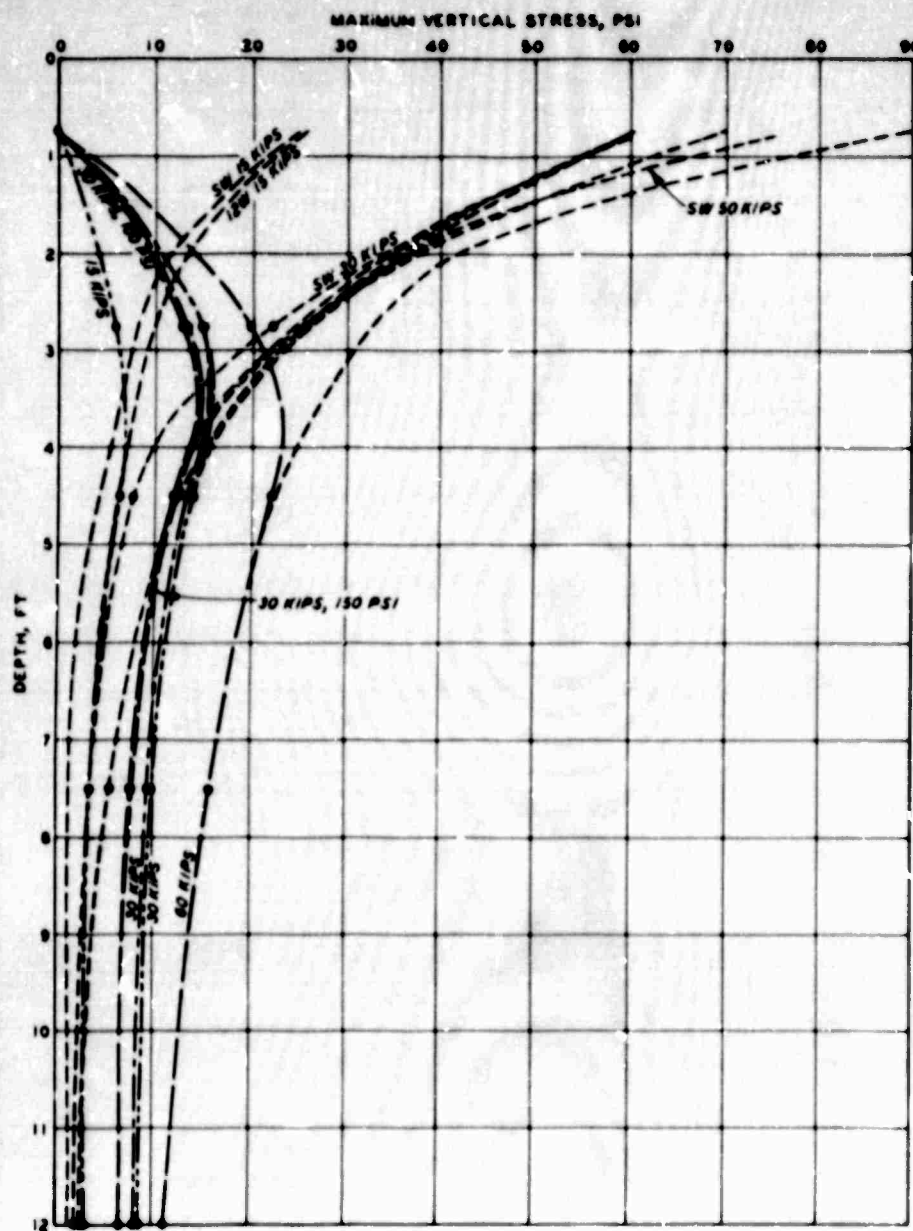


Figure 33. Comparison of Assembly Load Point Curves for Vertical Stress Under Dynamic Loads, Item 3, Flexible Pavement



LEGEND

- TWIN TANDEM 747
 --- 8 WHEEL
 --- 12 WHEEL
 --- LIMITING CURVE

NOTE: ALL LOADS ARE PER WHEEL
CURVES ARE AVERAGES OF THE
DUAL GAGE RESPONSES.

Figure 34. Depth Versus Vertical Stress for Static Load Tests, Assembly Load Point 1, Item 4, Flexible Pavement

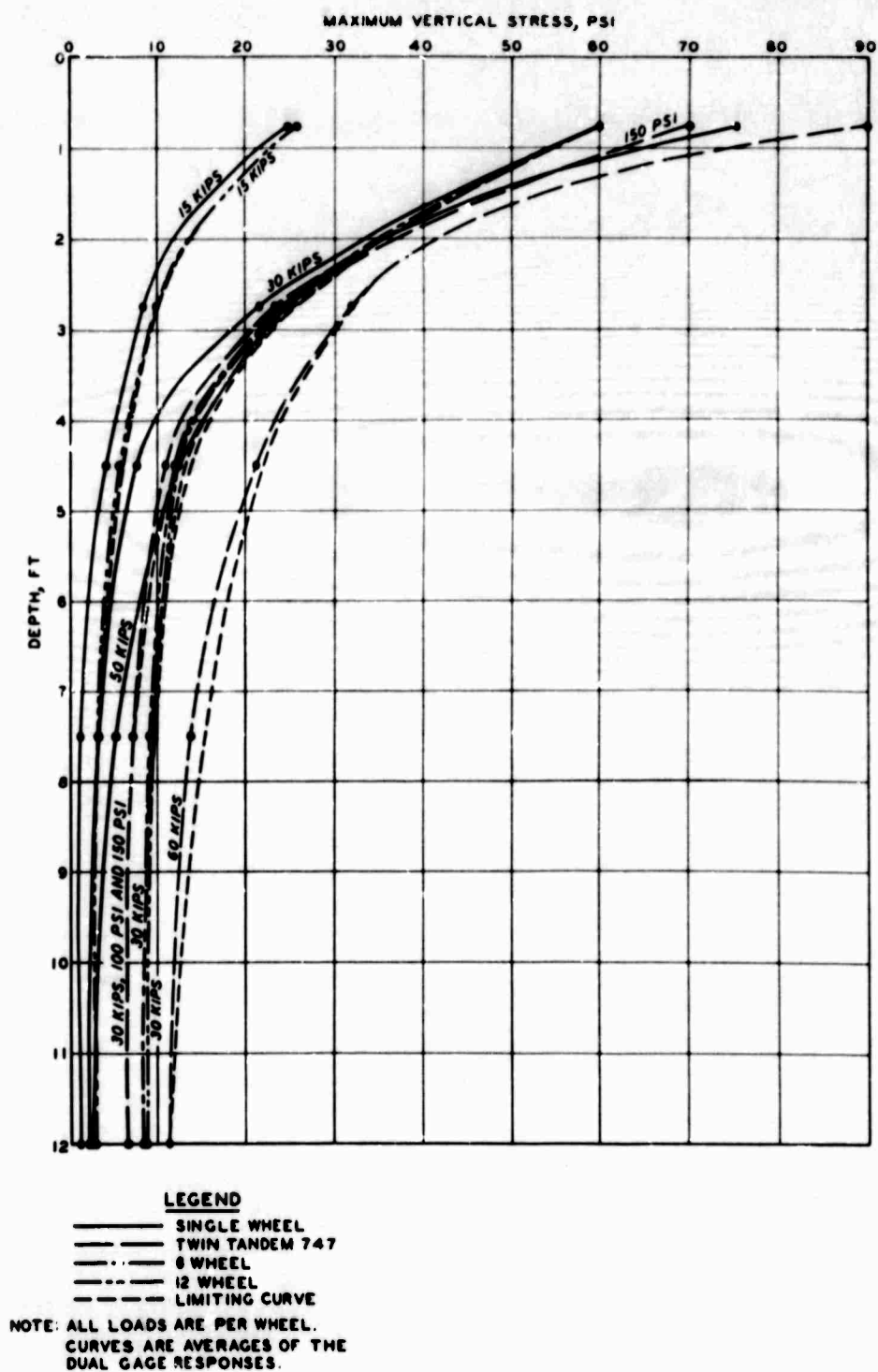


Figure 35. Depth Versus Vertical Stress for Static Load Tests,
Assembly Load Point 2, Item 4, Flexible Pavement

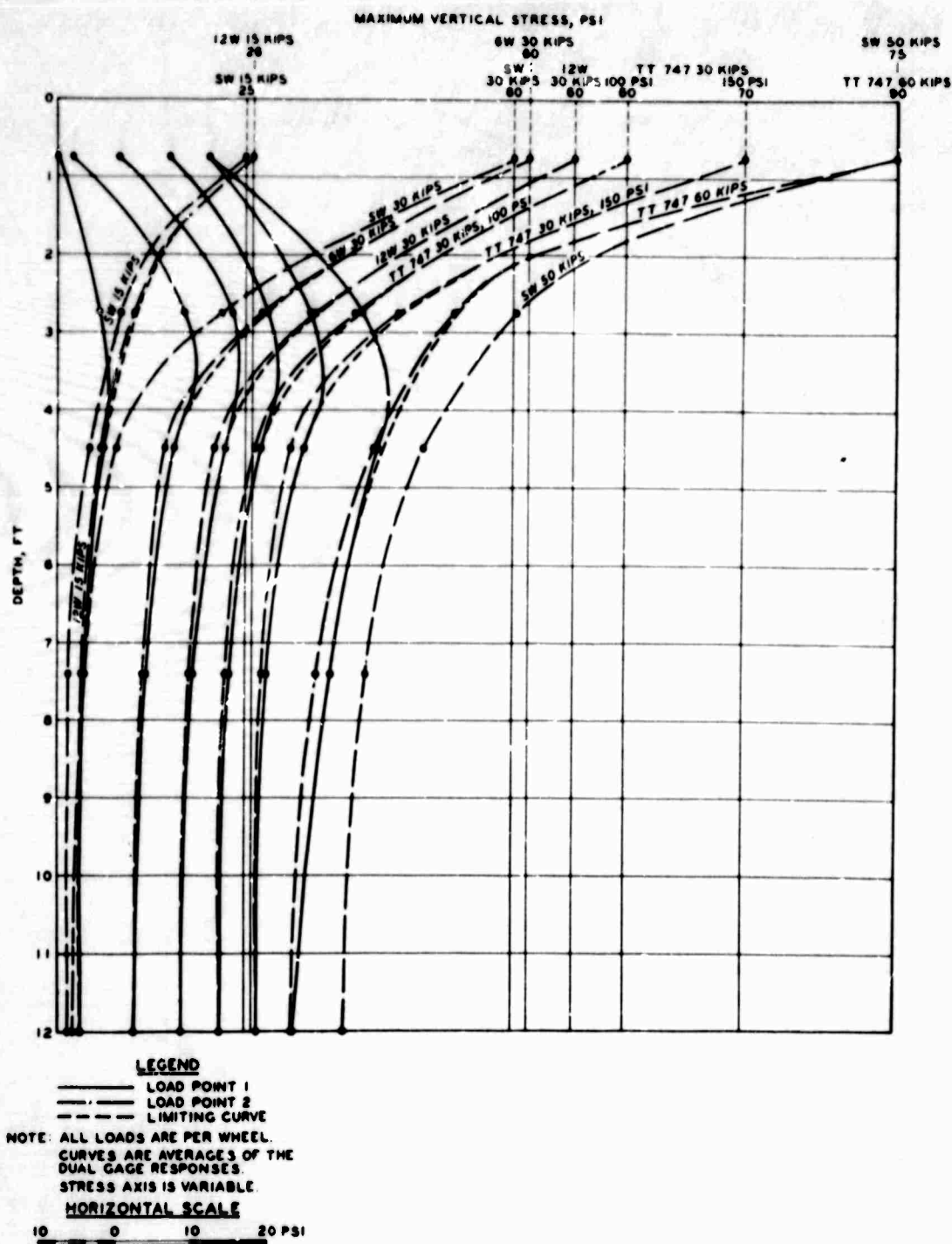
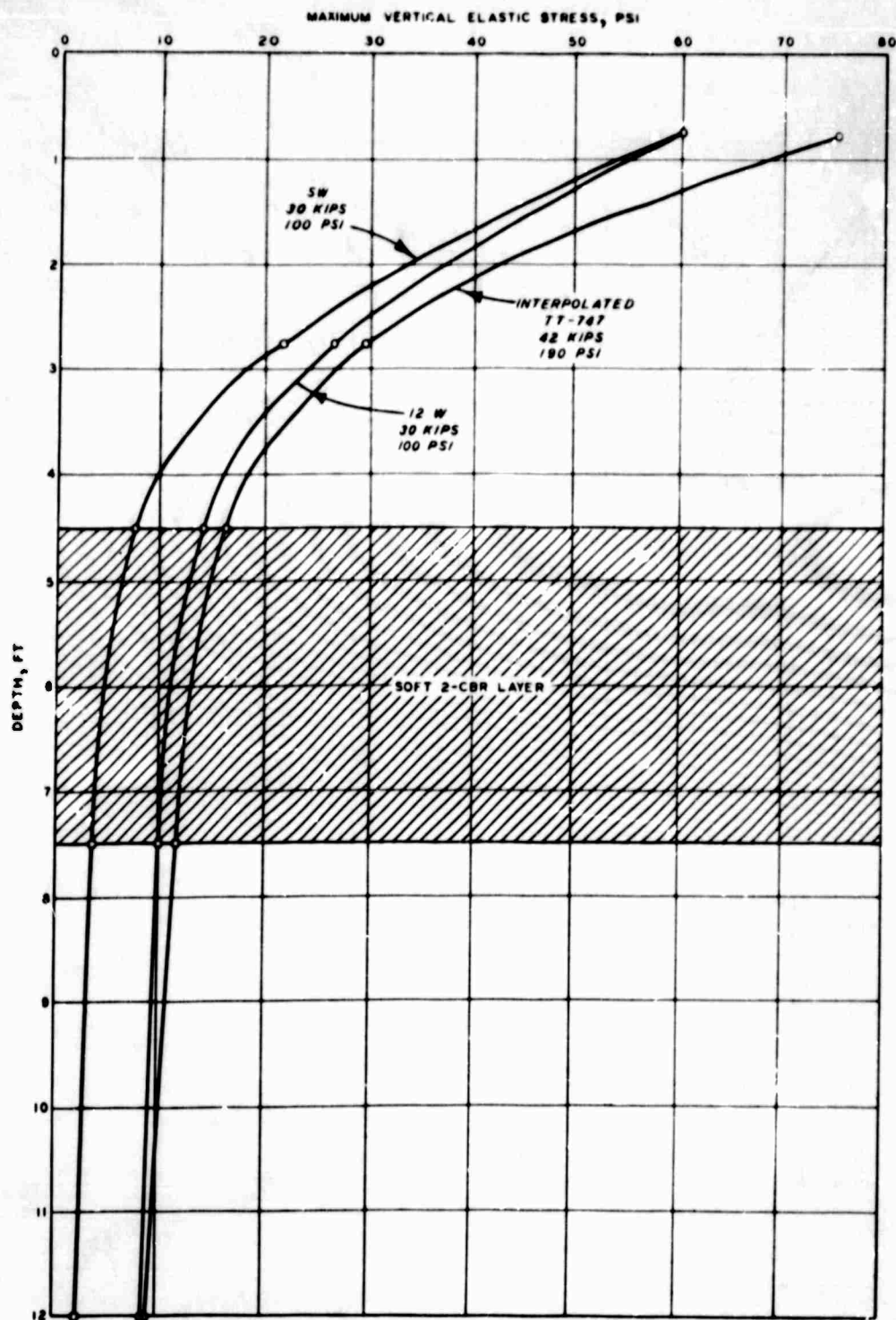
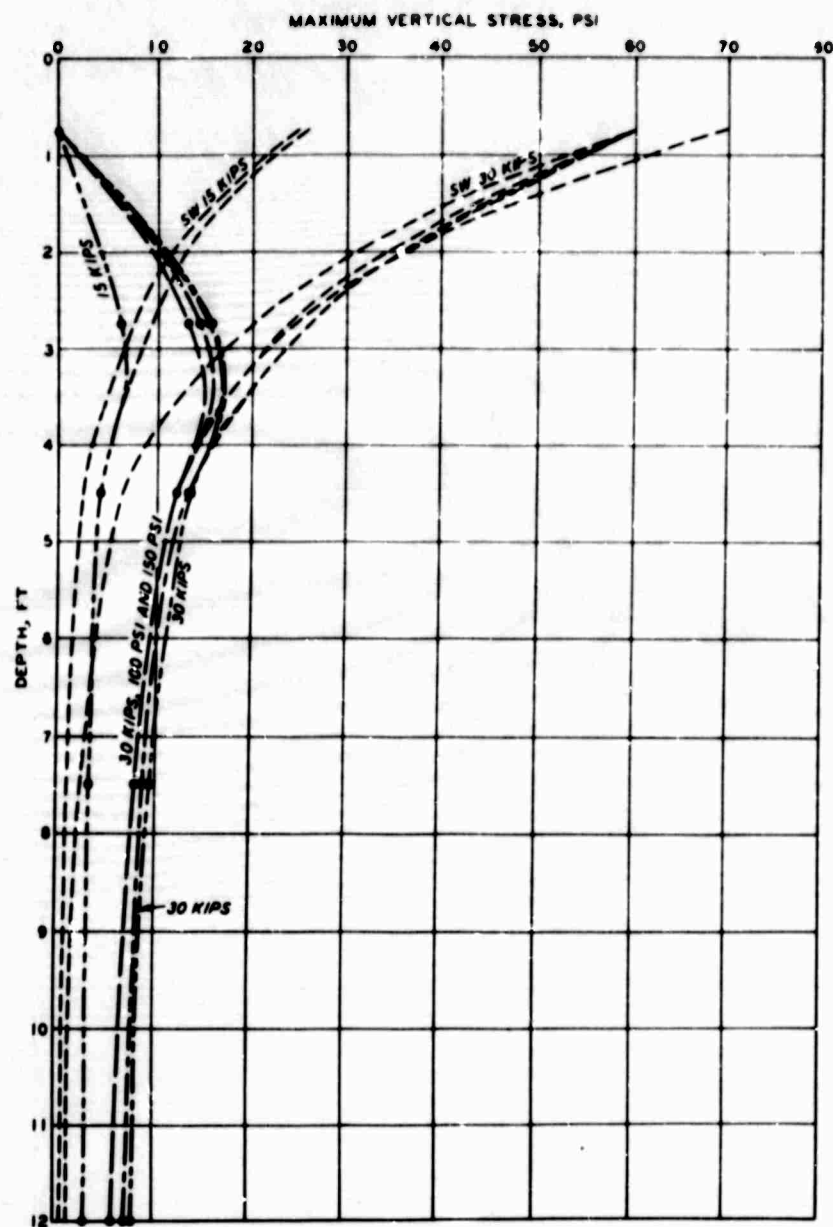


Figure 36. Comparison of Assembly Load Point Curves for Vertical Stress Under Static Loads, Item 4, Flexible Pavement



NOTE: CURVES ARE AVERAGES
OF GAGE RESPONSES.
ALL LOADS ARE PER WHEEL.

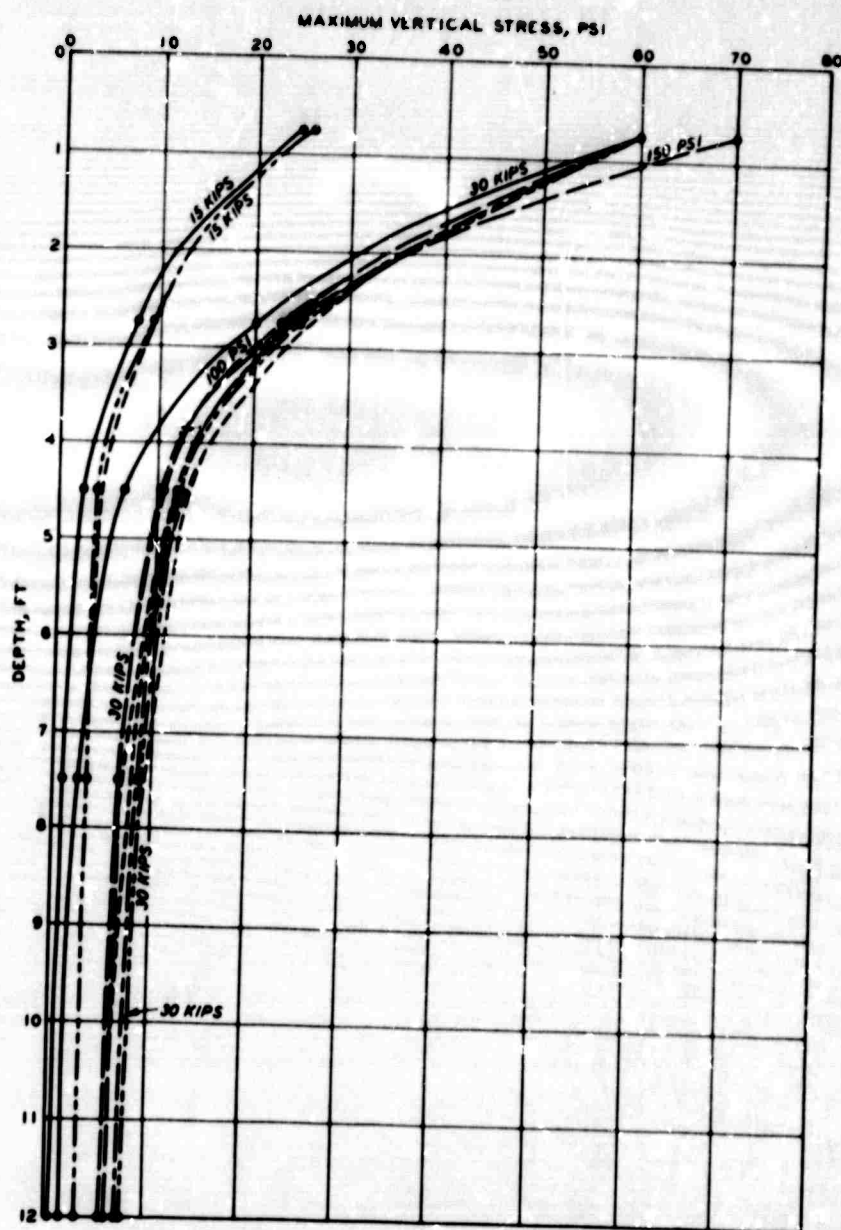
Figure 37. Elastic Stress Versus Depth for Static Load Tests, Item 4, Flexible Pavement

**LEGEND**

- TWIN TANDEM 747
- - - 6 WHEEL
- - - 12 WHEEL
- - - LIMITING CURVE

NOTE: ALL LOADS ARE PER WHEEL.
CURVES ARE AVERAGES OF THE
DUAL GAGE RESPONSES.

Figure 38. Depth Versus Vertical Stress for Dynamic Load Tests, Assembly Load Point 1, Item 4, Flexible Pavement



LEGEND
 — SINGLE WHEEL
 — TWIN TANDEM 747
 — 6 WHEEL
 — 12 WHEEL
 - - - LIMITING CURVE

NOTE: ALL LOADS ARE PER WHEEL.
 CURVES ARE AVERAGES OF THE
 DUAL GAGE RESPONSES.

Figure 39. Depth Versus Vertical Stress for Dynamic Load Tests, Assembly Load Point 2, Item 4, Flexible Pavement

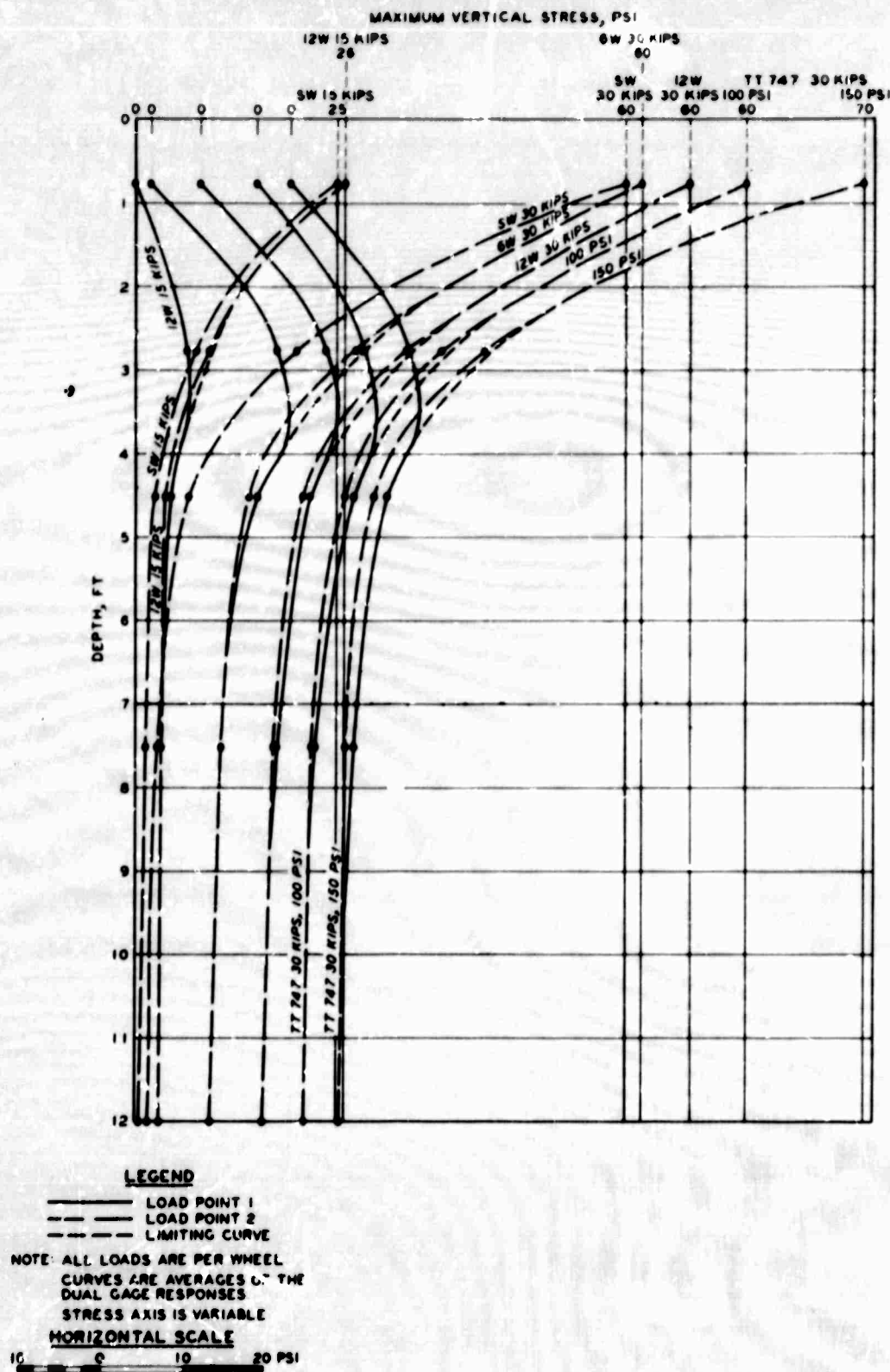


Figure 40. Comparison of Assembly Load Point Curves for Vertical Stress Under Dynamic Loads, Item 4, Flexible Pavement

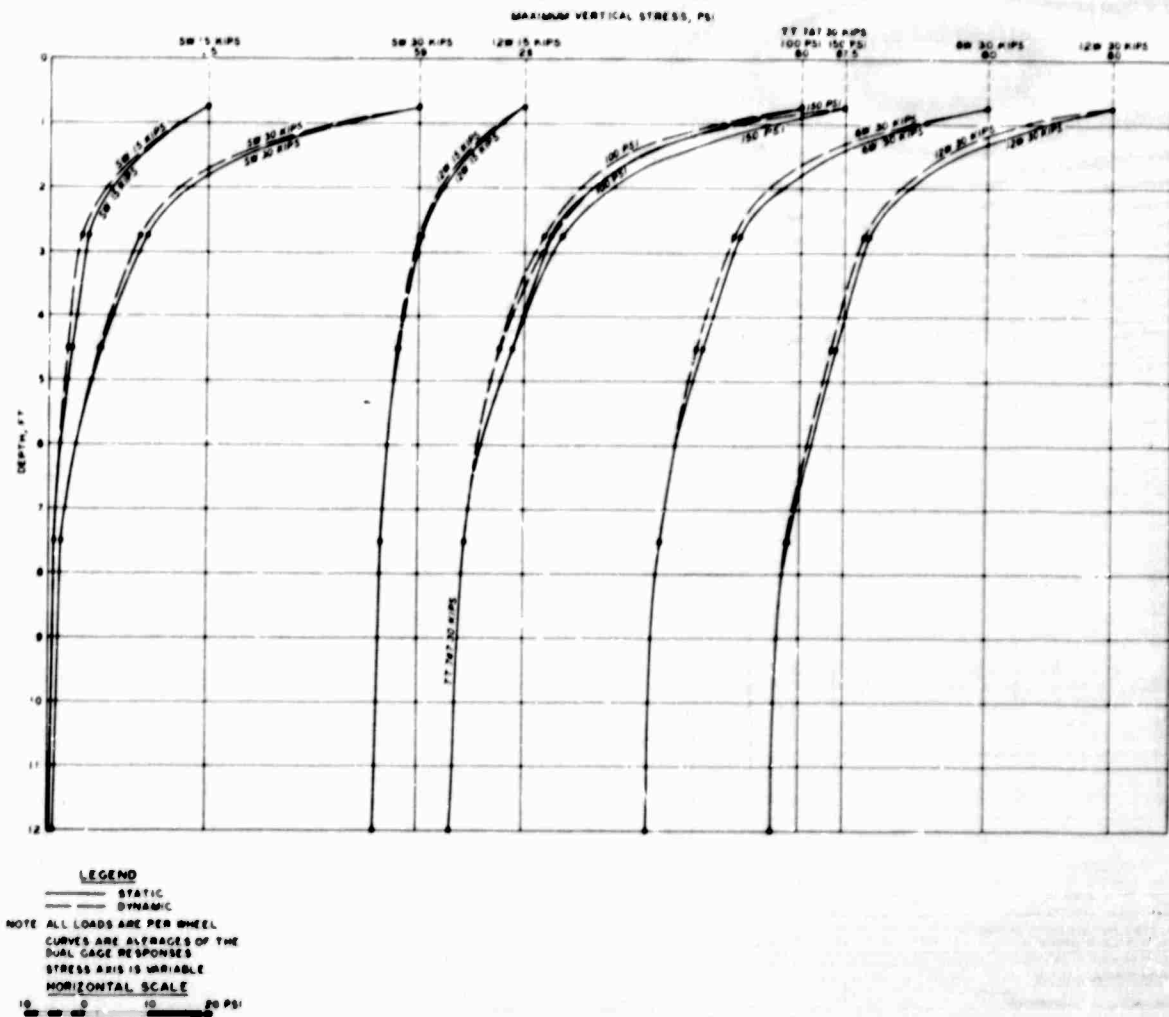


Figure 41. Static Versus Dynamic Load Limiting Vertical Stress Curves, Item 3, Flexible Pavement

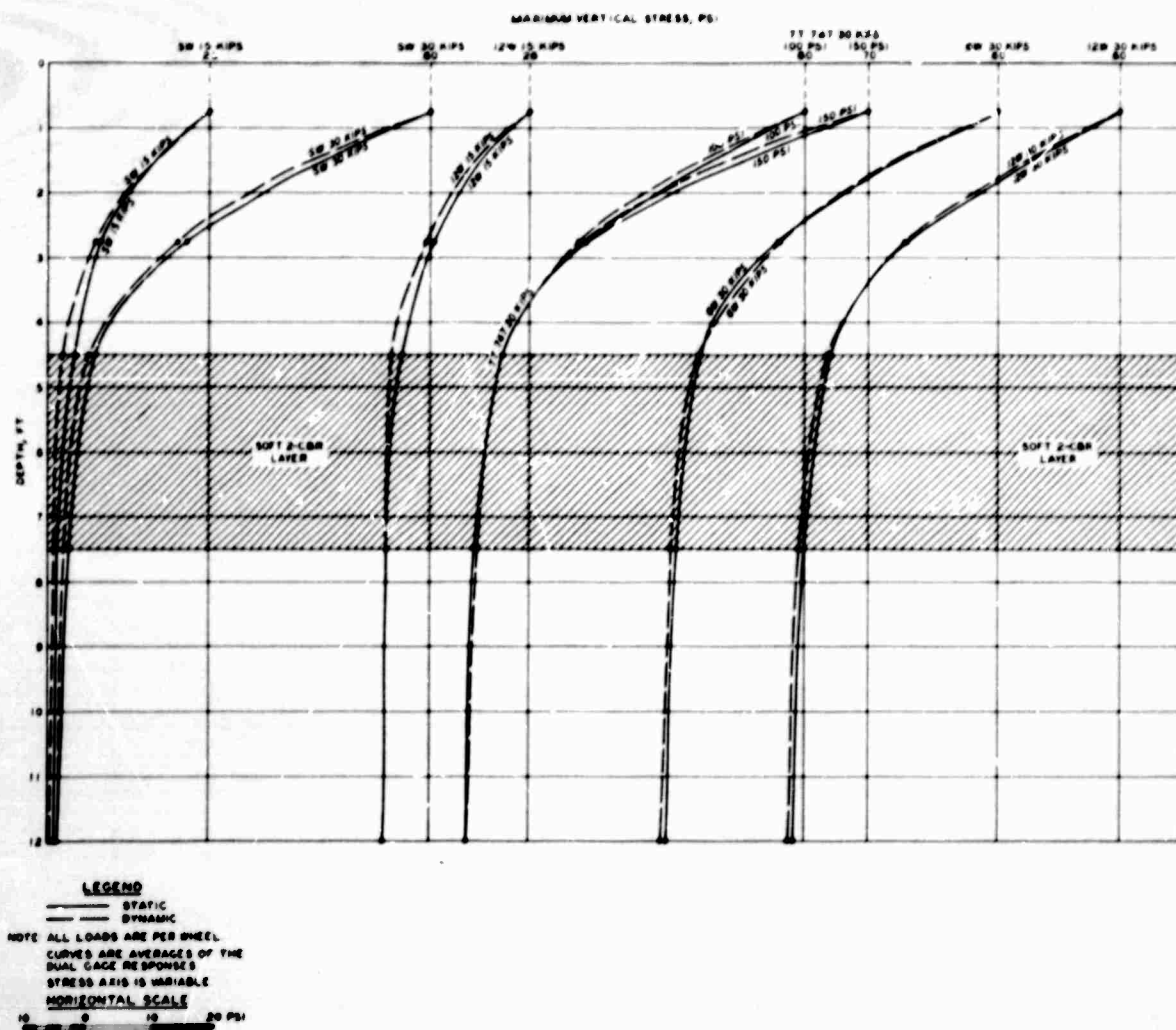


Figure 42. Static Versus Dynamic Load Limiting Vertical Stress Curves, Item 4, Flexible Pavement

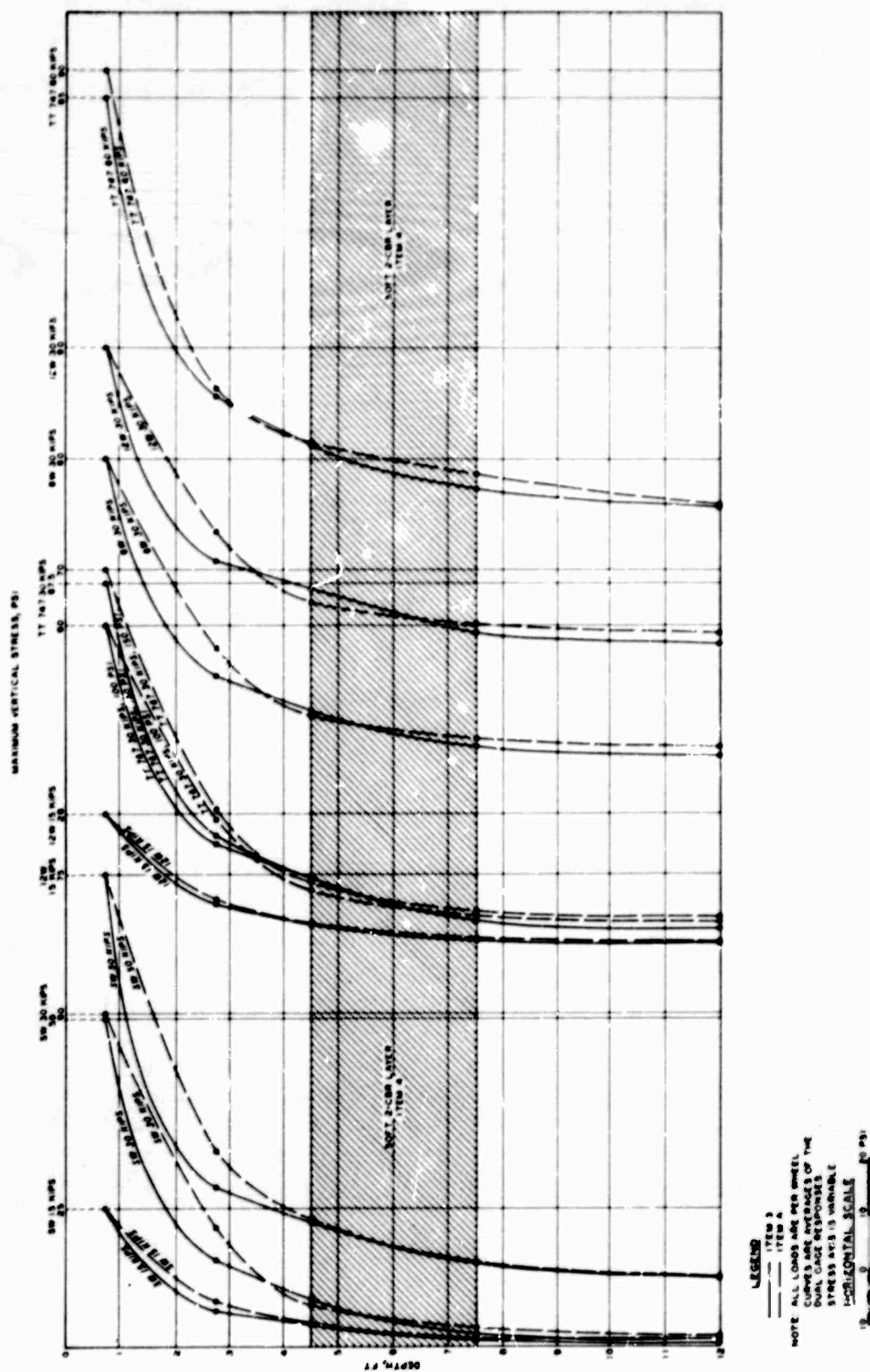


Figure 43. Item 3 Versus Item 4 Limiting Vertical Stress Curves, Static Load Flexible Pavement Tests

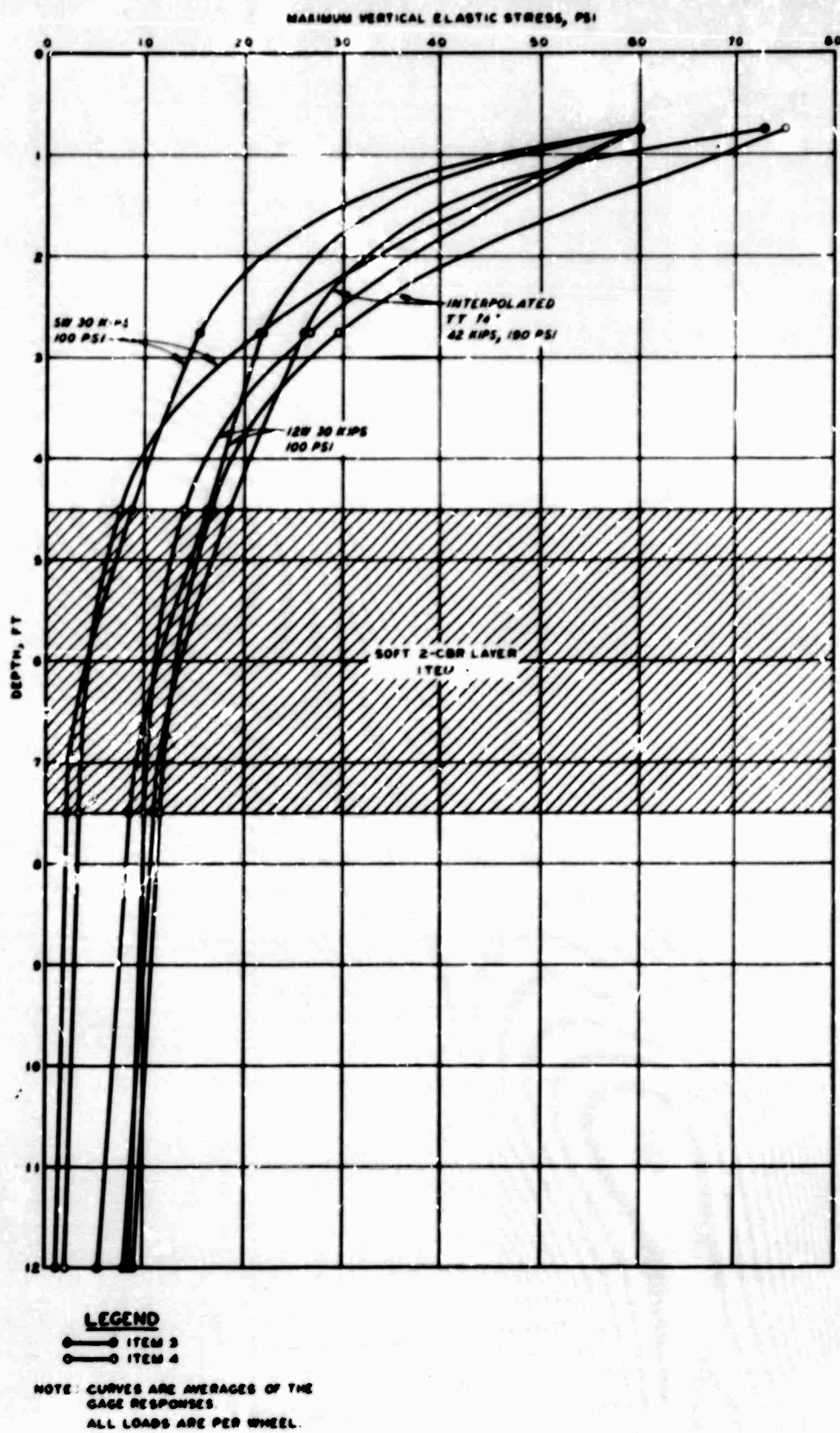


Figure 44. Comparison of Elastic Stress Versus Depth for Static Load Tests, Items 3 and 4, Flexible Pavement

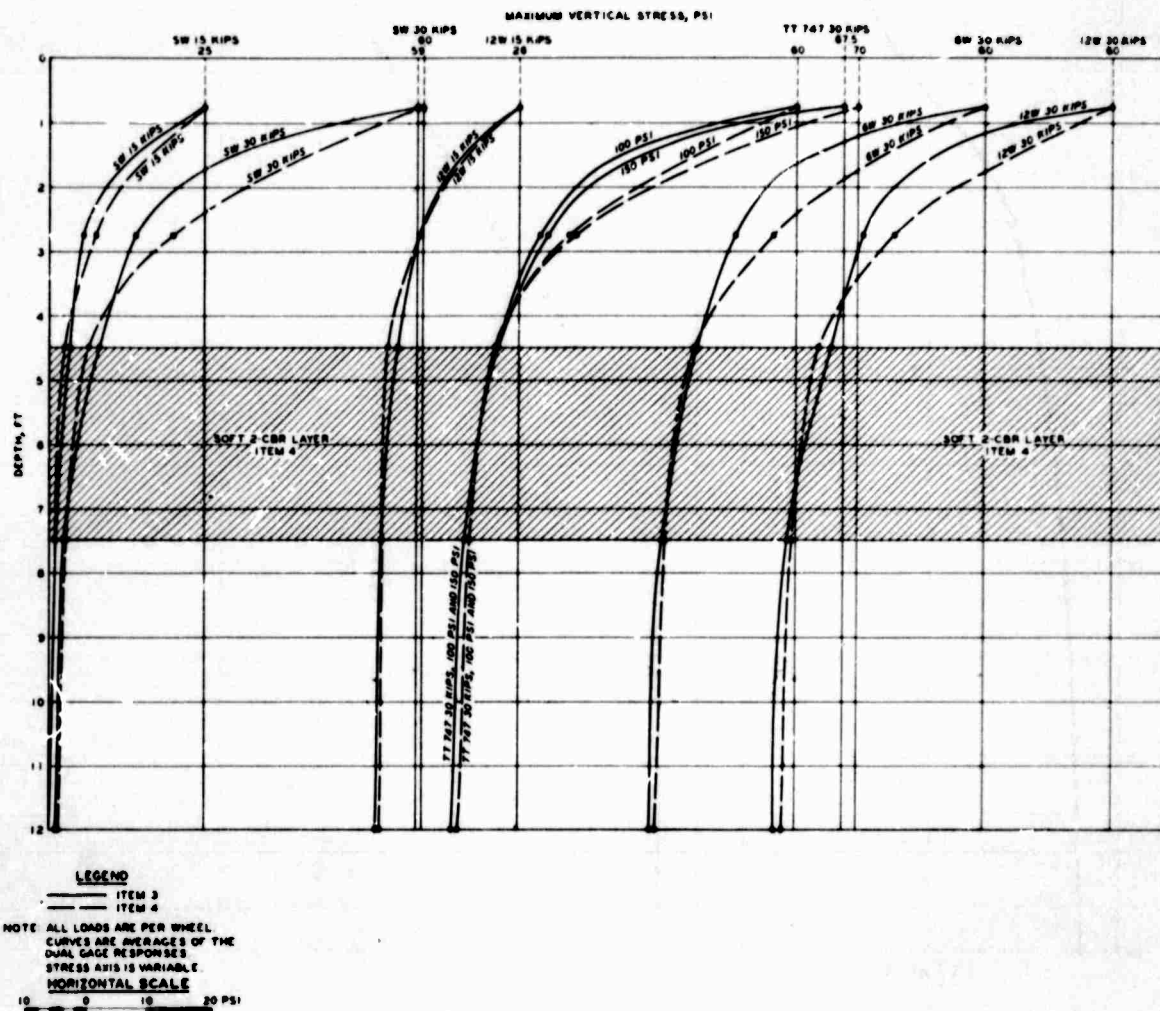
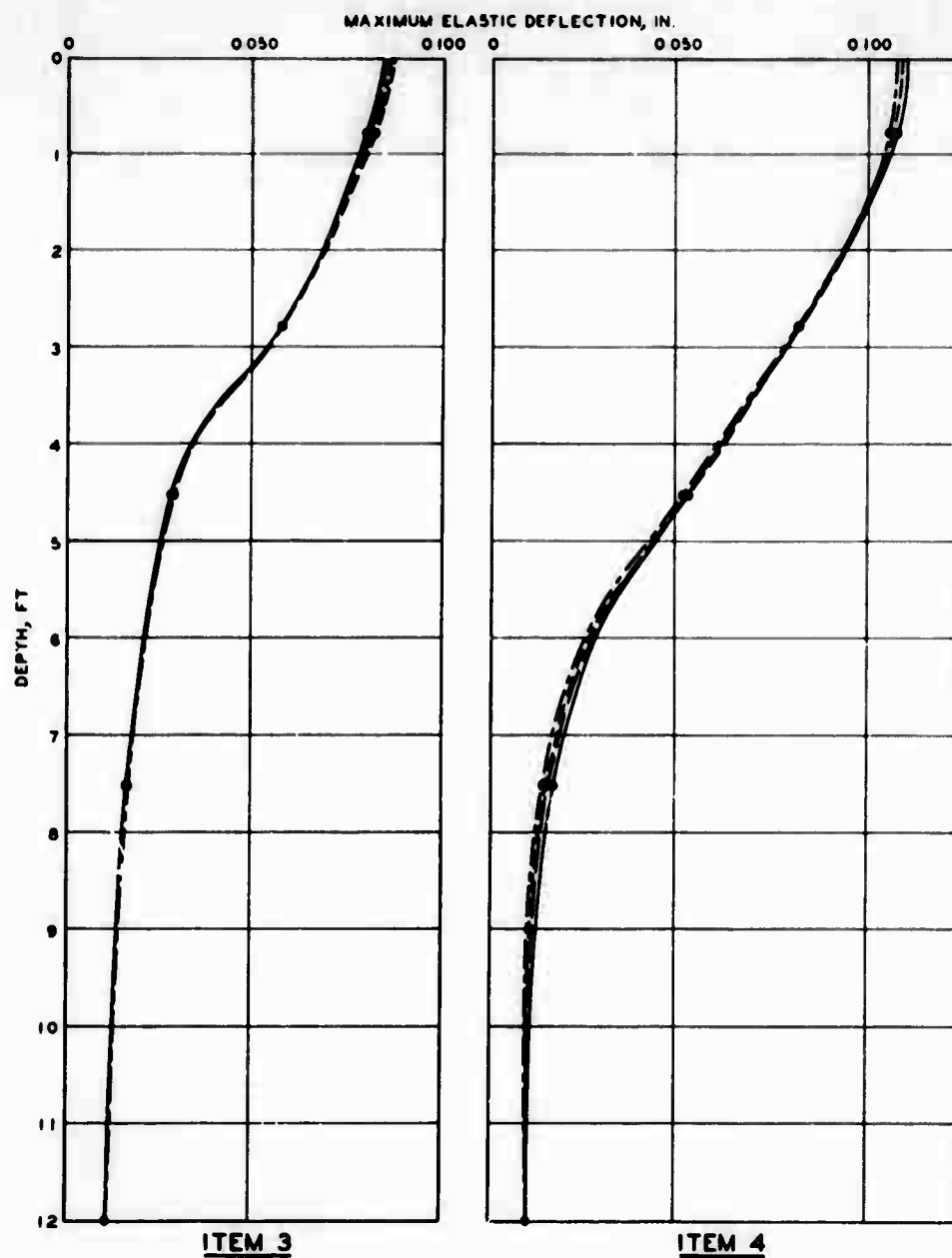


Figure 45. Item 3 Versus Item 4 Limiting Vertical Stress Curves, Dynamic Load Flexible Pavement Tests



LEGEND

- SLOW (1-2 MPH)
- NORMAL (APPROX 3 MPH)
- - - 2 X NORMAL (5-8 MPH)
- - - FAST (8-10 MPH)

NOTE: CURVES ARE AVERAGES OF THE DUAL GAGE RESPONSES.

Figure 46. Depth Versus Deflection for Speed Tests, Items 3 and 4. Single-Wheel, 30-kip Load, Flexible Pavement Tests

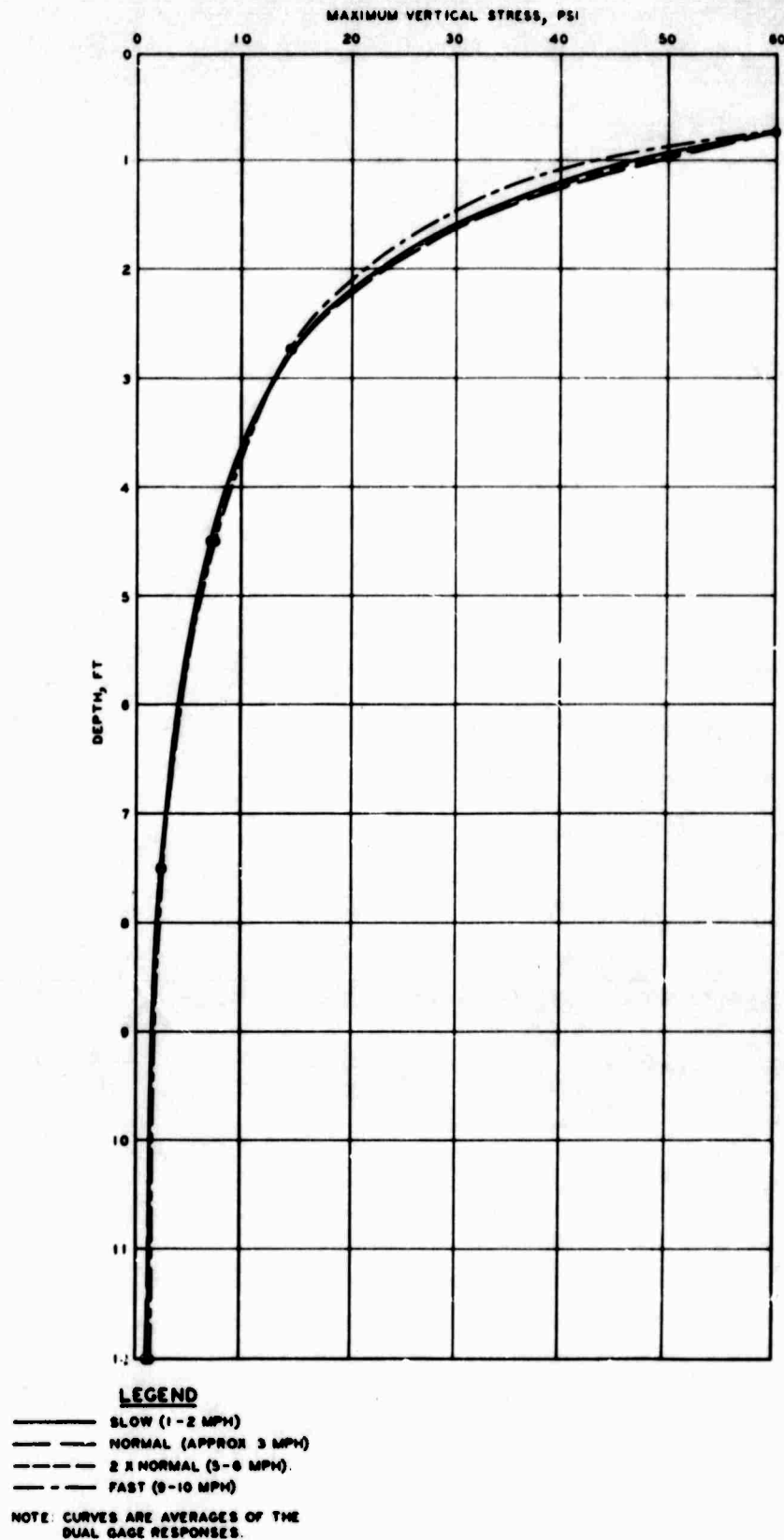
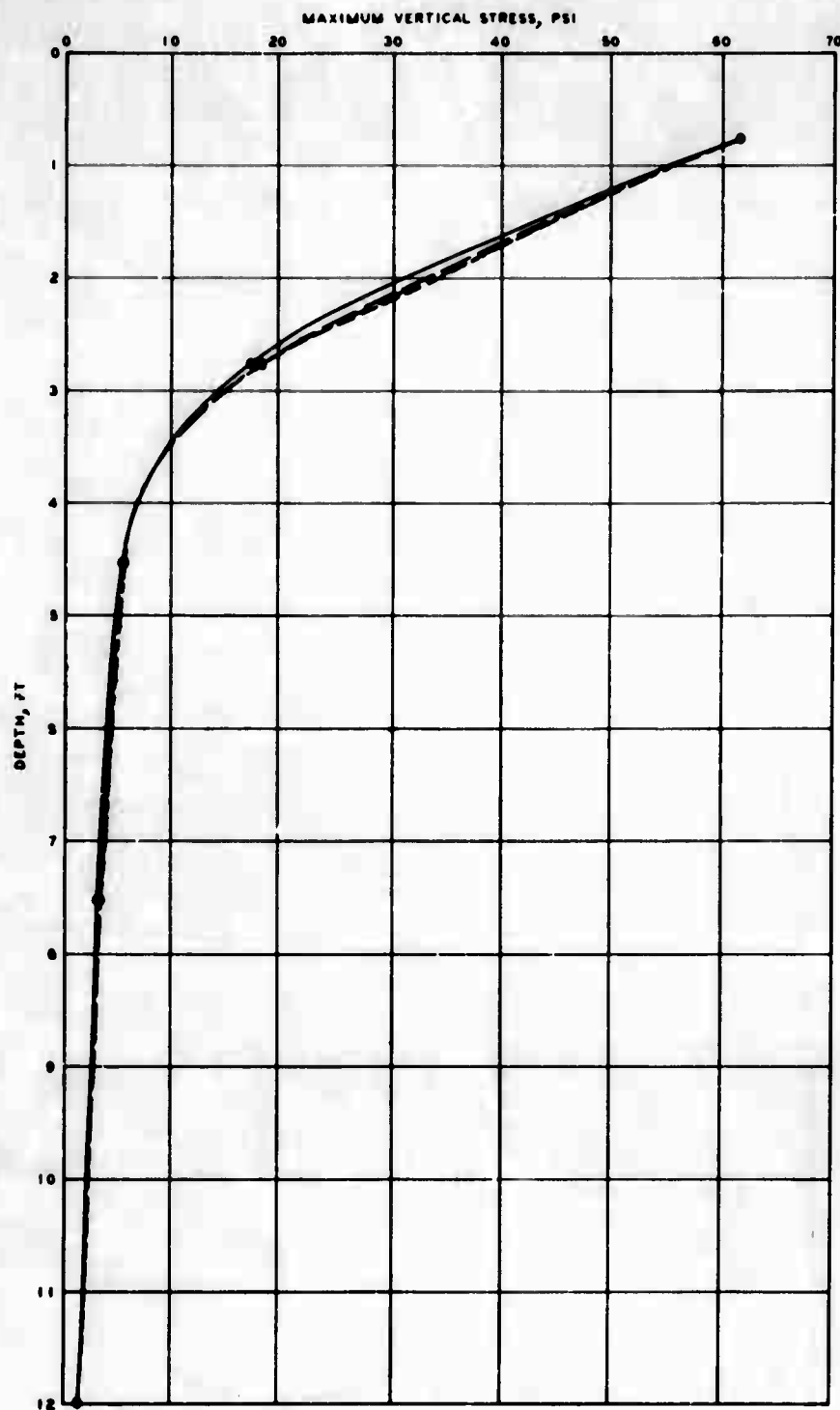


Figure 47. Depth Versus Vertical Stress for Speed Tests, Item 3. Single-Wheel, 30-kip Load, Flexible Pavement Tests



LEGEND

- SLOW (1-2 MPH)
- NORMAL (APPROX 3 MPH)
- 2 X NORMAL (5-8 MPH)
- FAST (8-10 MPH)

NOTE: CURVES ARE AVERAGES OF THE DUAL GAGE RESPONSES.

Figure 48. Depth Versus Vertical Stress for Speed Tests, Item 4. Single-Wheel, 30-kip Load, Flexible Pavement Tests

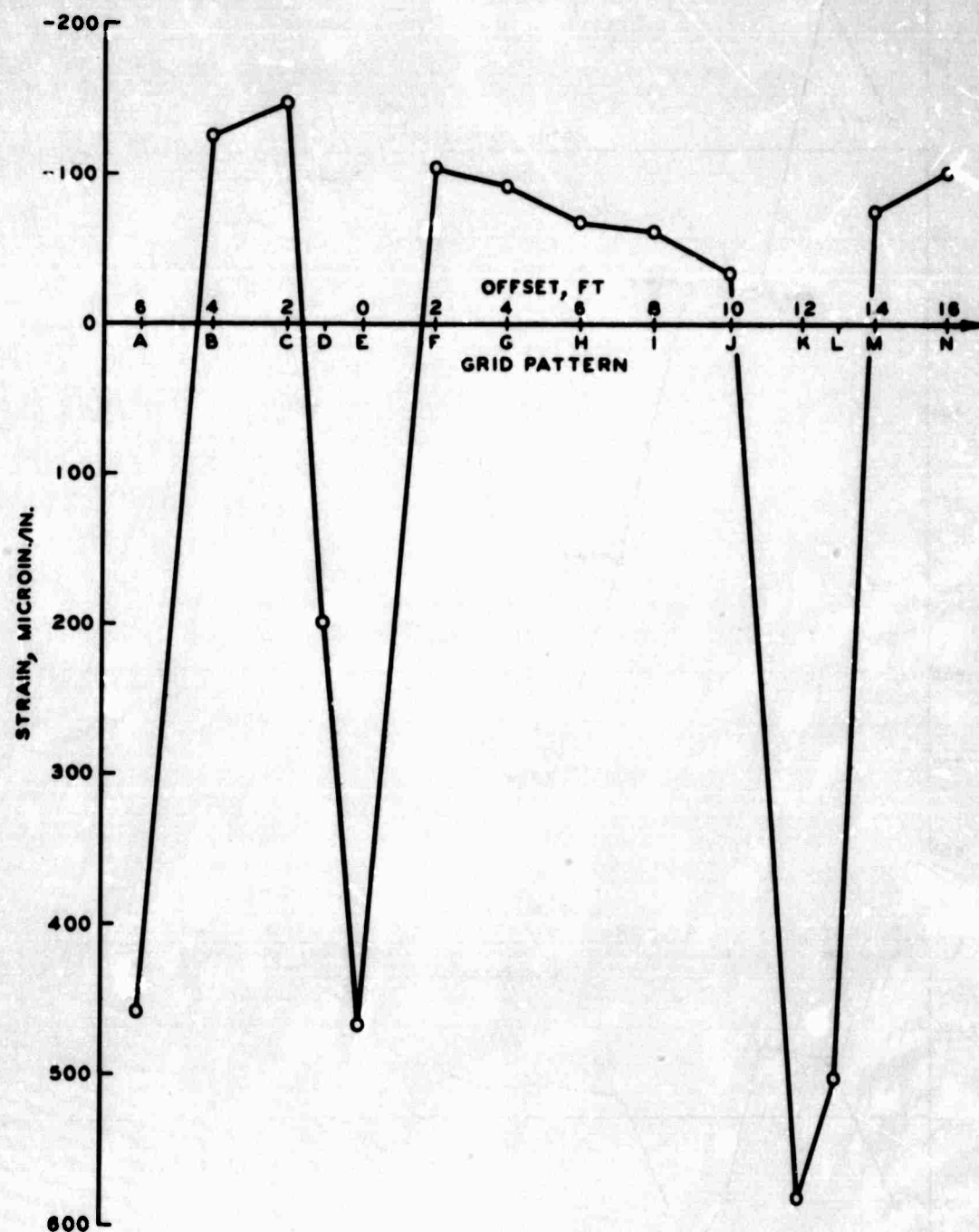


Figure 49. East-West Offsets Versus Pavement Strain for Assembly Load Point 2, Static Load Tests, 12-Wheel, 360-kip Load. Gage S1 (1N), Item 4, Flexible Pavement. Offset Distances Are Parallel to the Direction of Forward Movement of the Assembly; Offset Distances and Grid Pattern Are Shown in Figure 4.

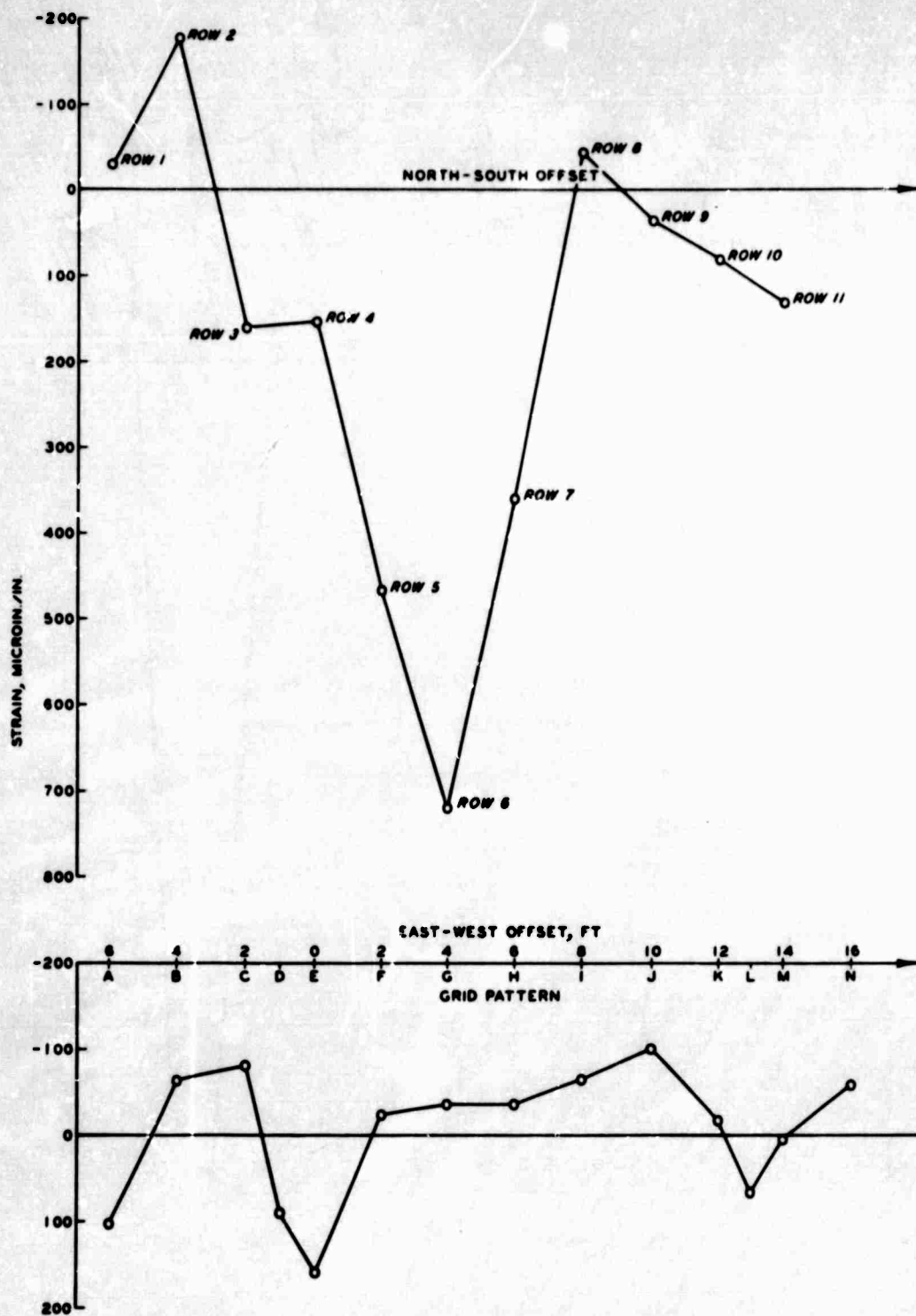


Figure 50. East-West and North-South Offsets Versus Pavement Strain for Assembly Load Point 1, Static Load Tests, 12-Wheel, 360-kip Load. Gage S1 (\uparrow N), Item 4, Flexible Pavement. N-S and E-W Offset Distances Are Parallel and Perpendicular, Respectively, to the Direction of Forward Movement of the Assembly. Offset Distances, Row Numbers, and Grid Patterns Are Shown in Figure 4.

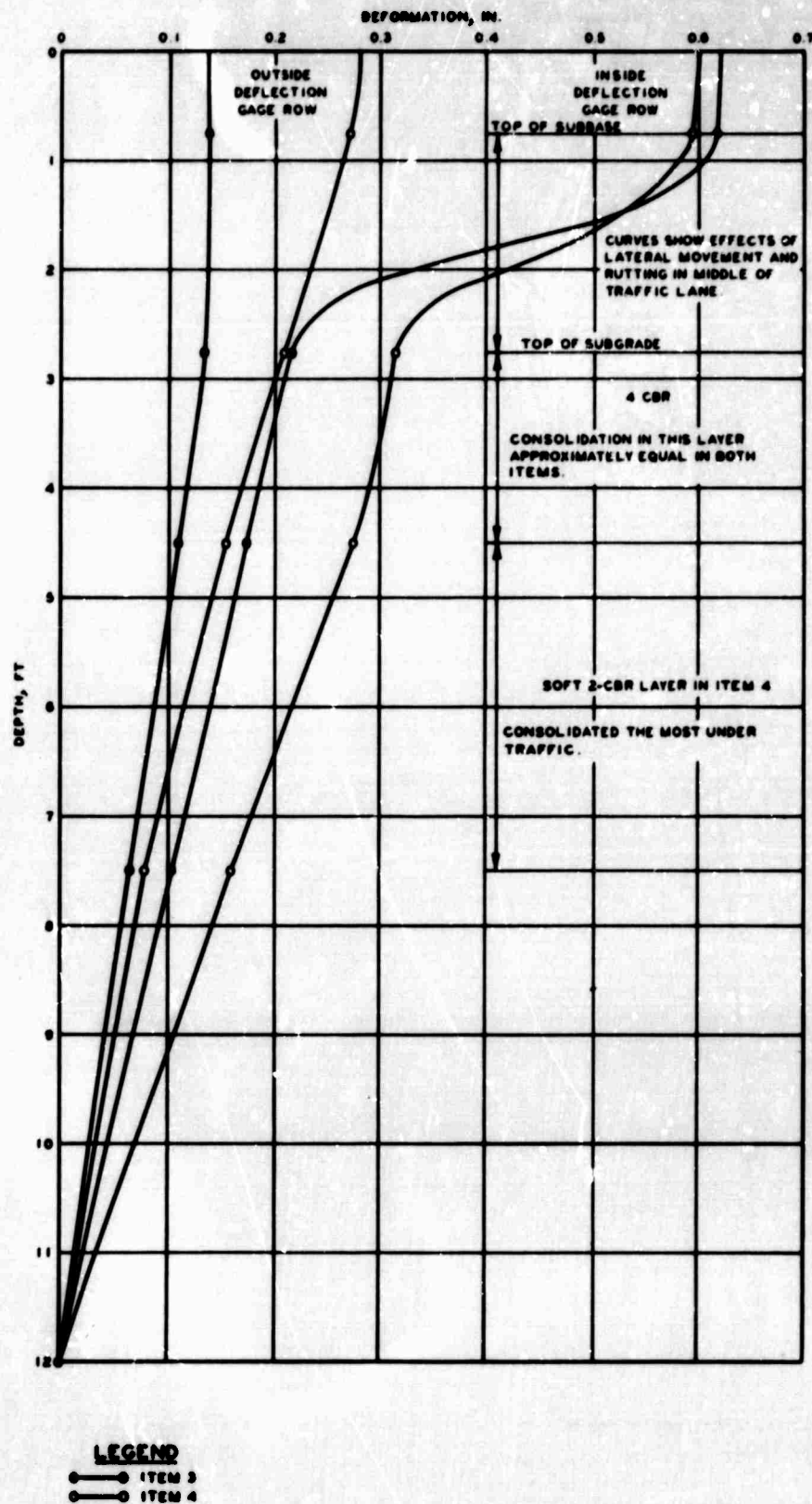
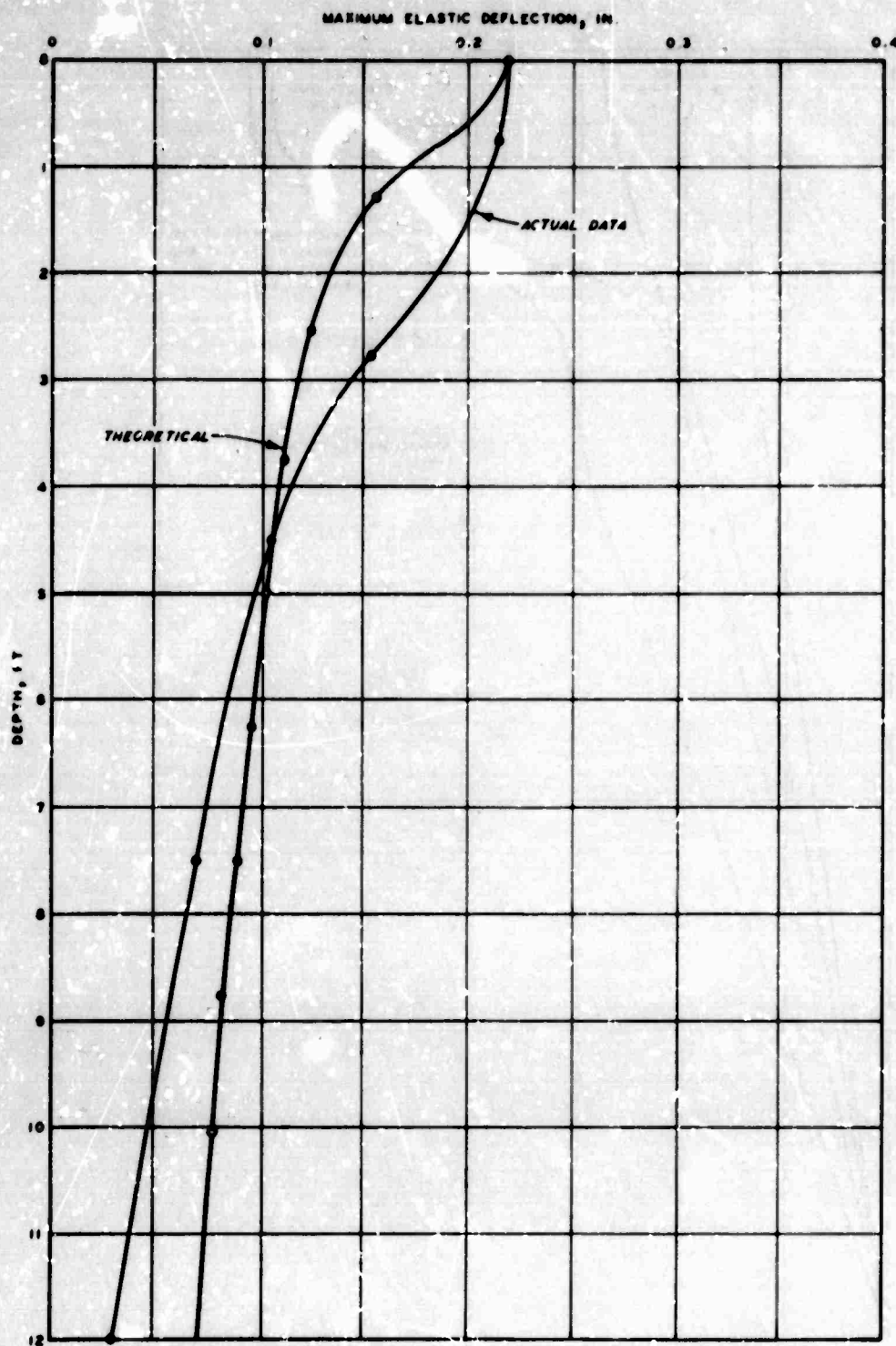
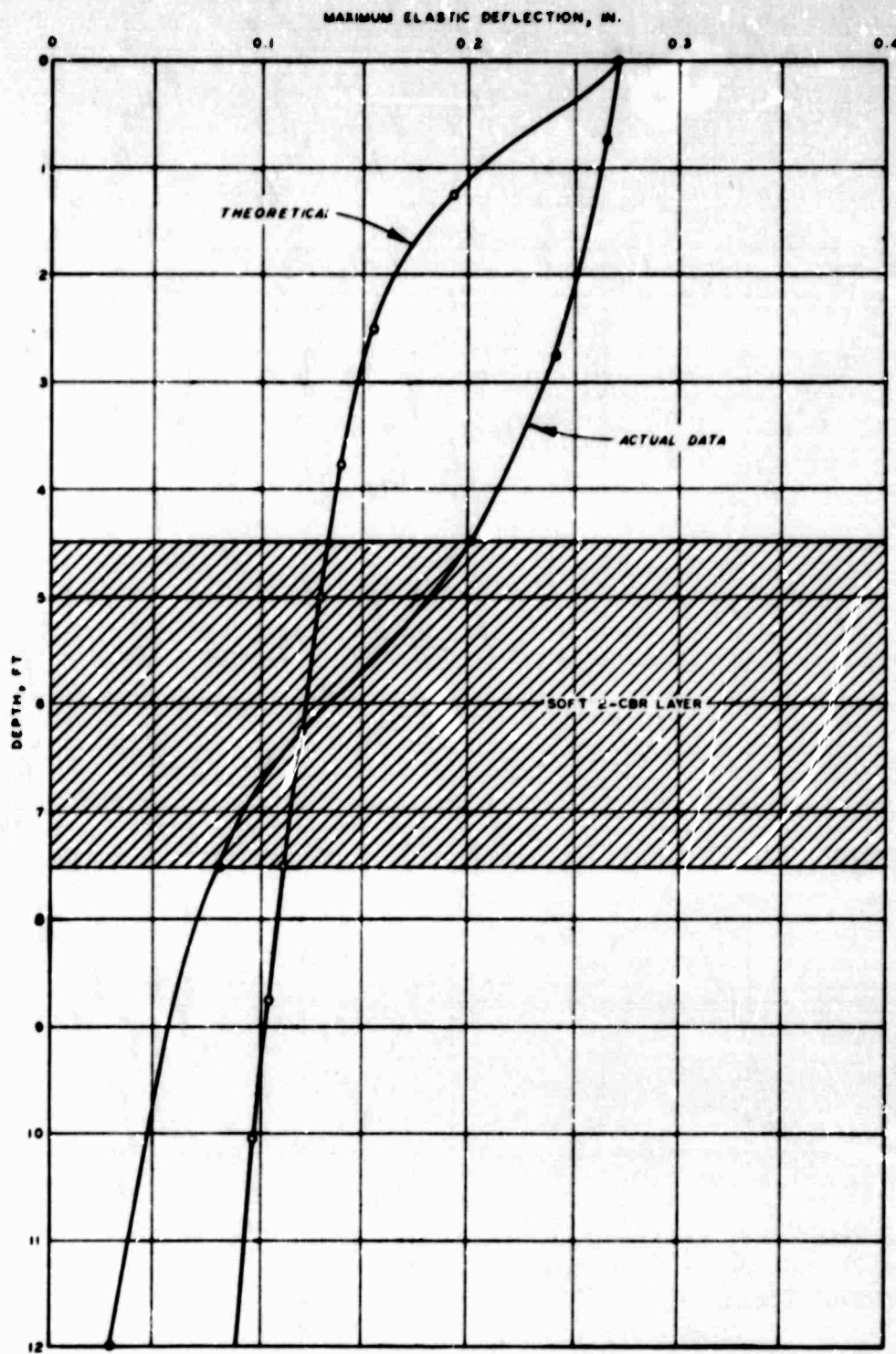


Figure 51. Deformation for the Elapsed Time Period of Traffic Tests Versus Depth for Items 3 and 4, Flexible Pavement



NOTE: CURVE IS AVERAGE OF GAGE RESPONSE.
LOAD IS PER WHEEL.

Figure 52. Comparison of the Computed and Actual Data for Maximum Elastic Deflection Versus Depth for 12-Wheel, 30-kip Load (100-psi Tire Inflation Pressure), Item 3, Flexible Pavement



NOTE: CURVE IS AVERAGE OF GAGE RESPONSE.
LOAD IS PER WHEEL

Figure 53. Comparison of the Computed and Actual Data for Maximum Elastic Deflection Versus Depth for 12-Wheel, 30-kip Load (100-psi Tire Inflation Pressure), Item 4, Flexible Pavement

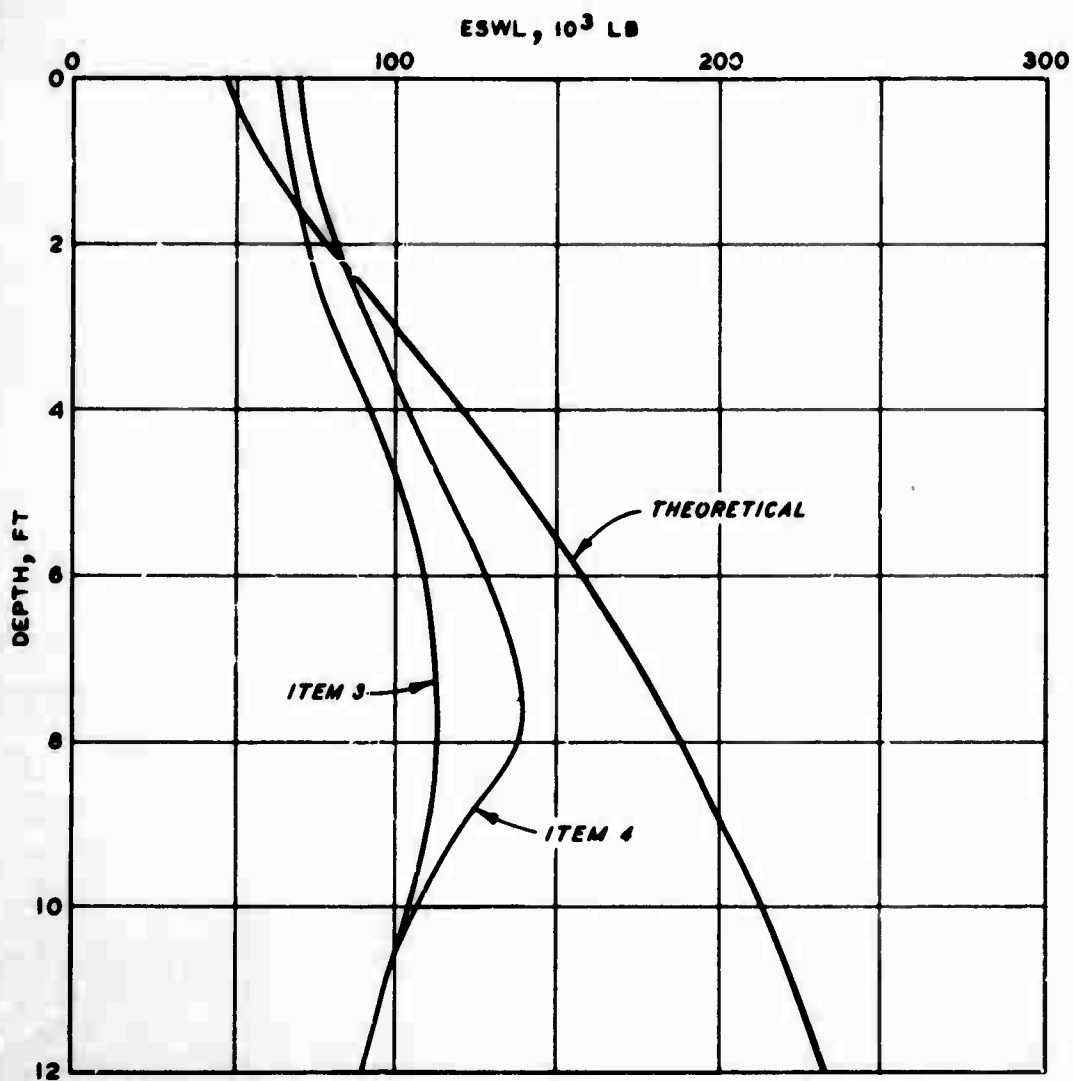


Figure 54. Comparison of the Computed Curve with Actual Data for ESWL Versus Depth. 12-Wheel, 360-kip Load, Flexible Pavement Tests

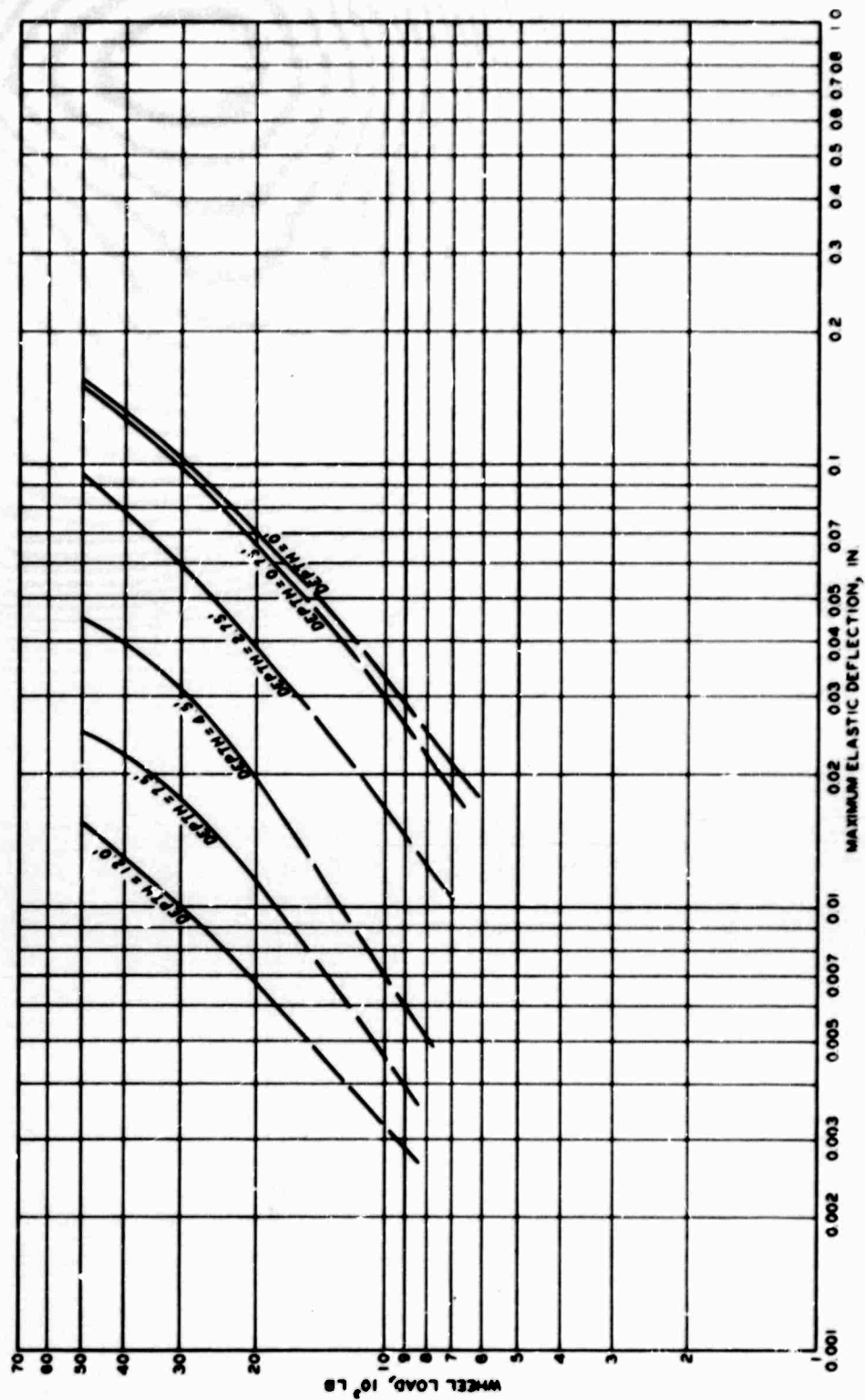


Figure 55. Log-Log Plot of Wheel Load Versus Deflection for Static Load, Single-Wheel Tests, Item 3, Flexible Pavement

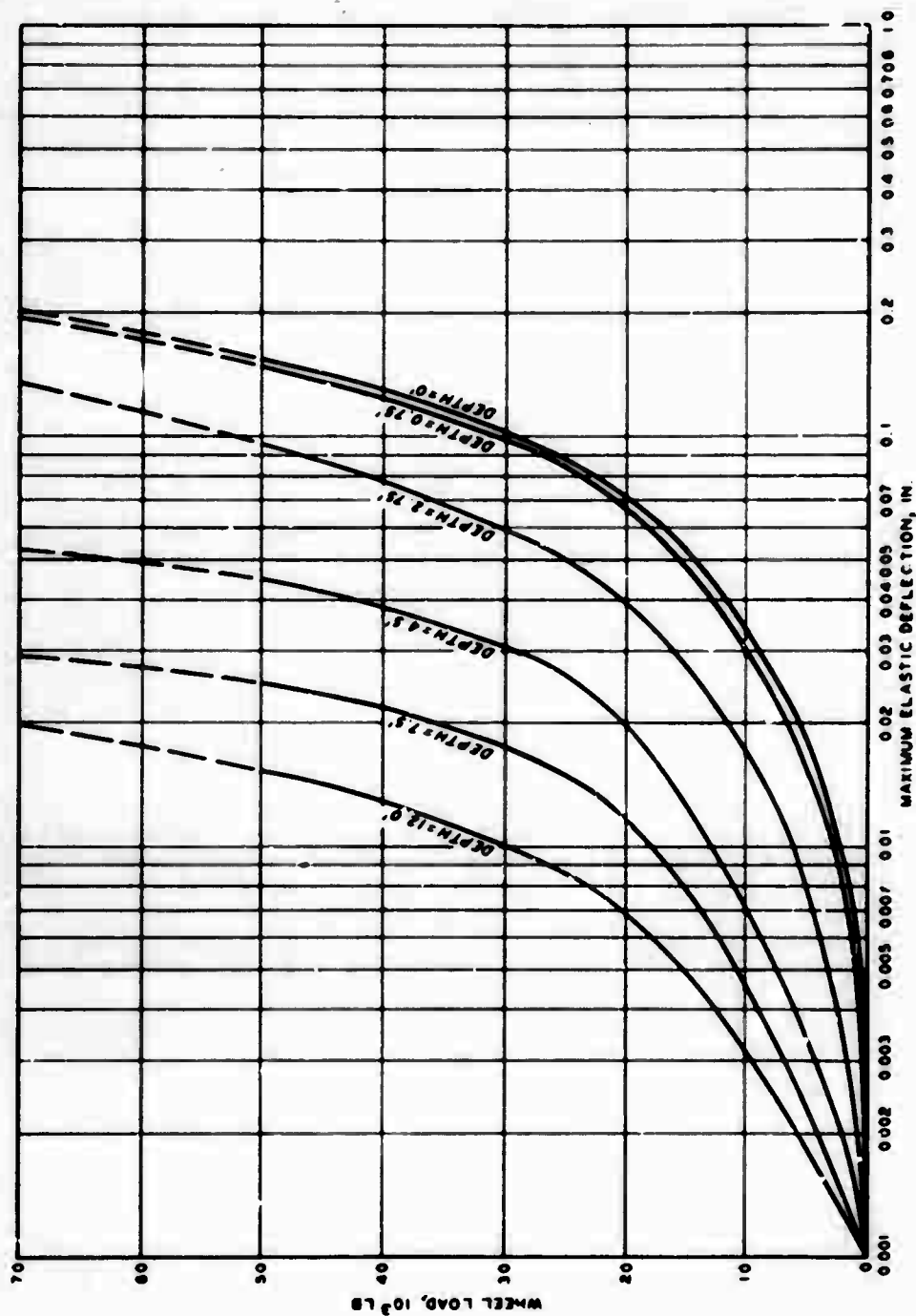


Figure 56. Semilog Plot of Wheel Load Versus Deflection for Static Load, Single-Wheel Tests, Item 3, Flexible Pavement (Same Data Shown in Figure 55)

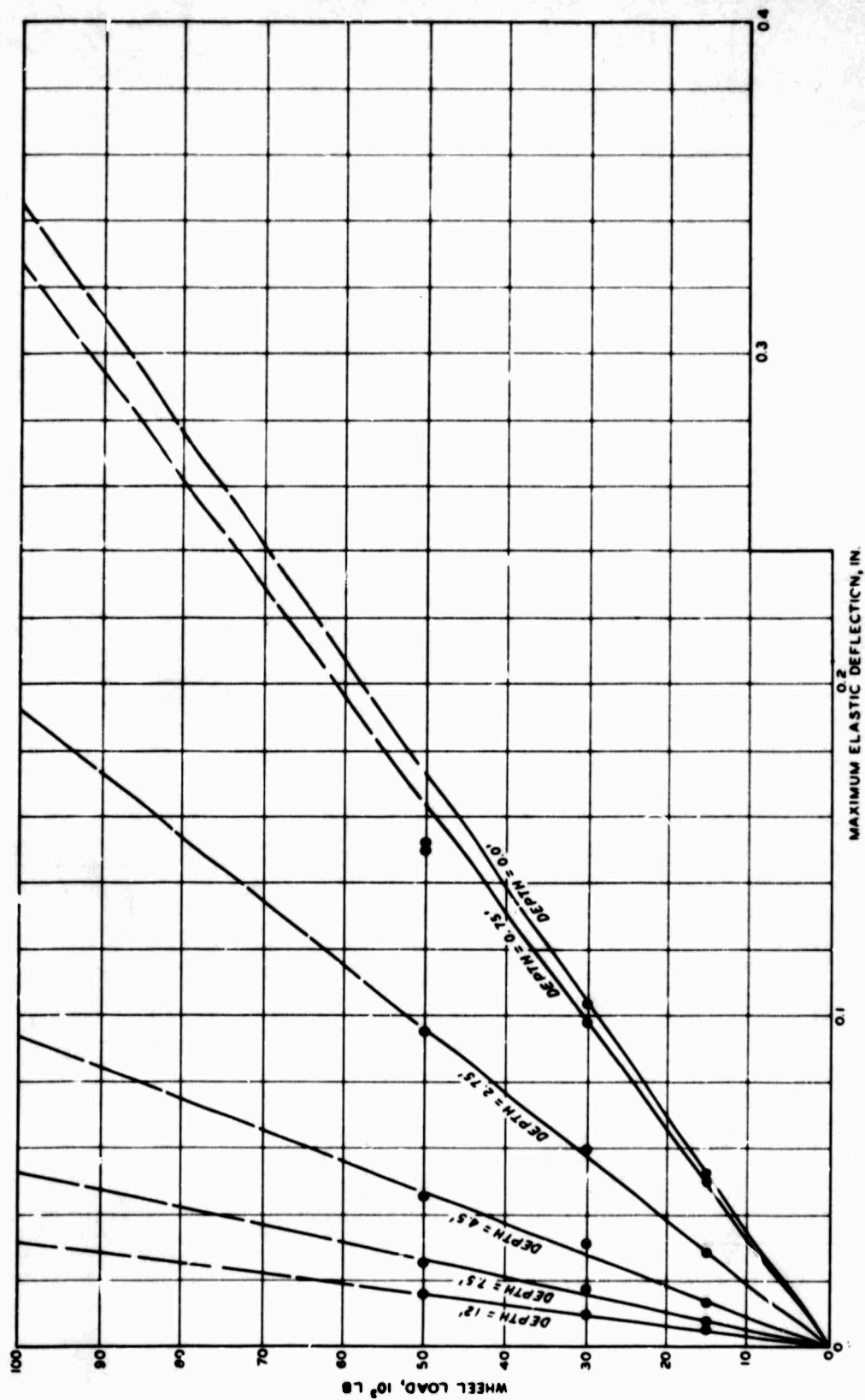


Figure 57. Arithmetic Plot of Wheel Load Versus Deflection for Static Load, Single-Wheel Tests, Item 3, Flexible Pavement (Same Data Shown in Figure 55)

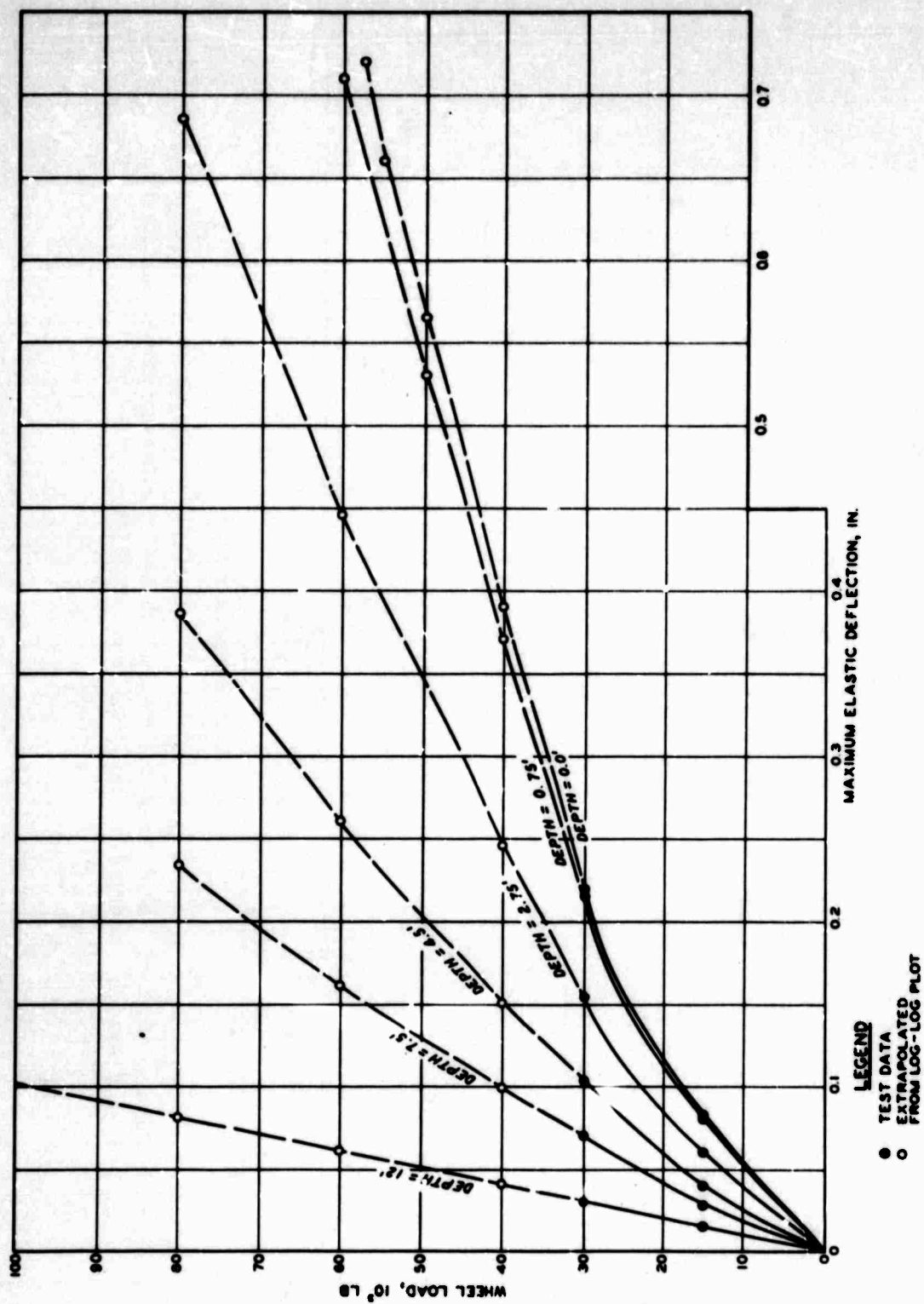


Figure 58. Arithmetic Plot of Wheel Load Versus Deflection for Static Load, 12-Wheel Tests, Item 3, Flexible Pavement (Data Extrapolated from Figure 59)

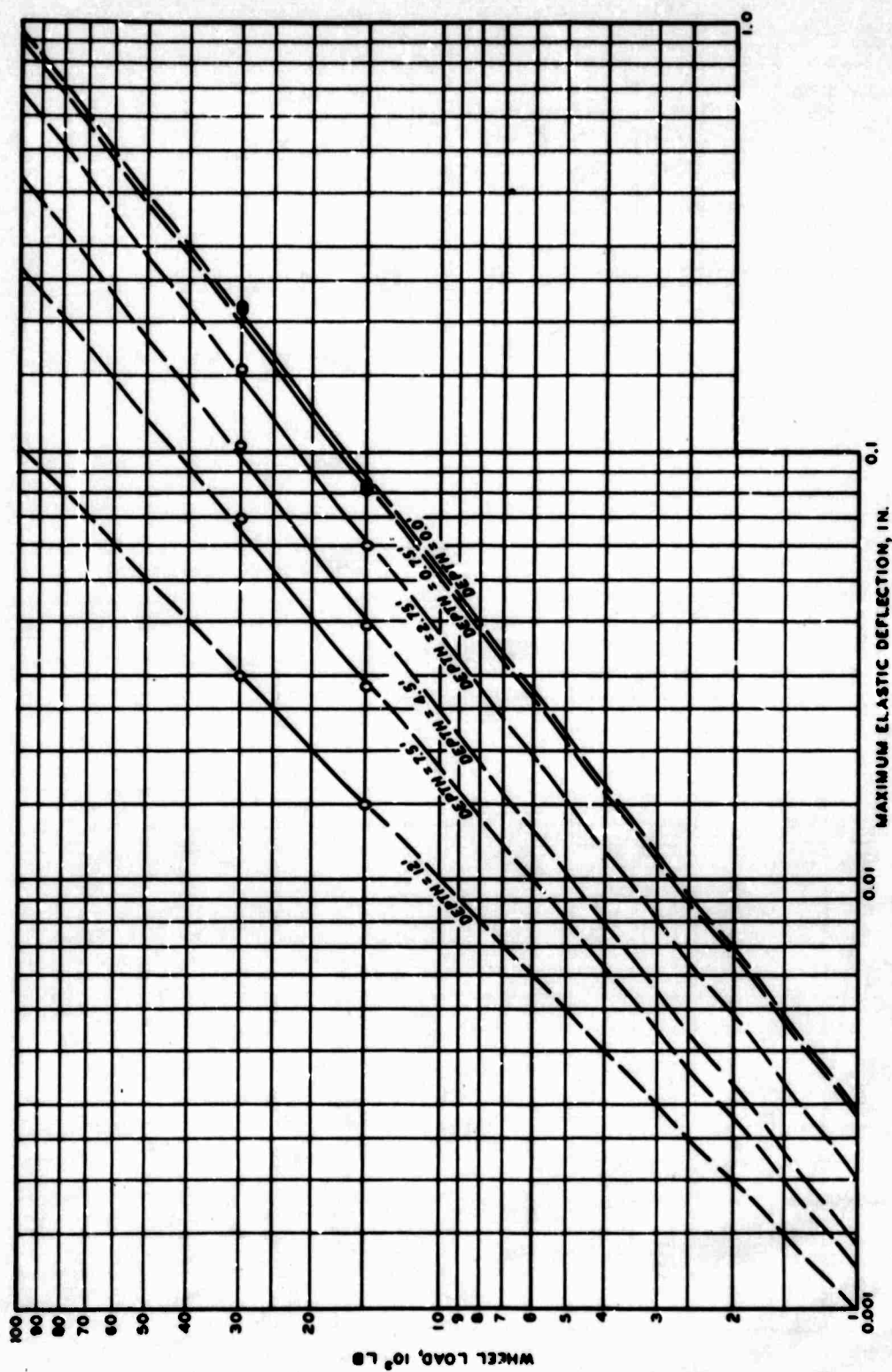


Figure 59. Log-Log Plot of Wheel Load Versus Deflection for Static Load, 12-Wheel Tests, Item 3, Flexible Pavement (Same Data Shown in Figure 58)

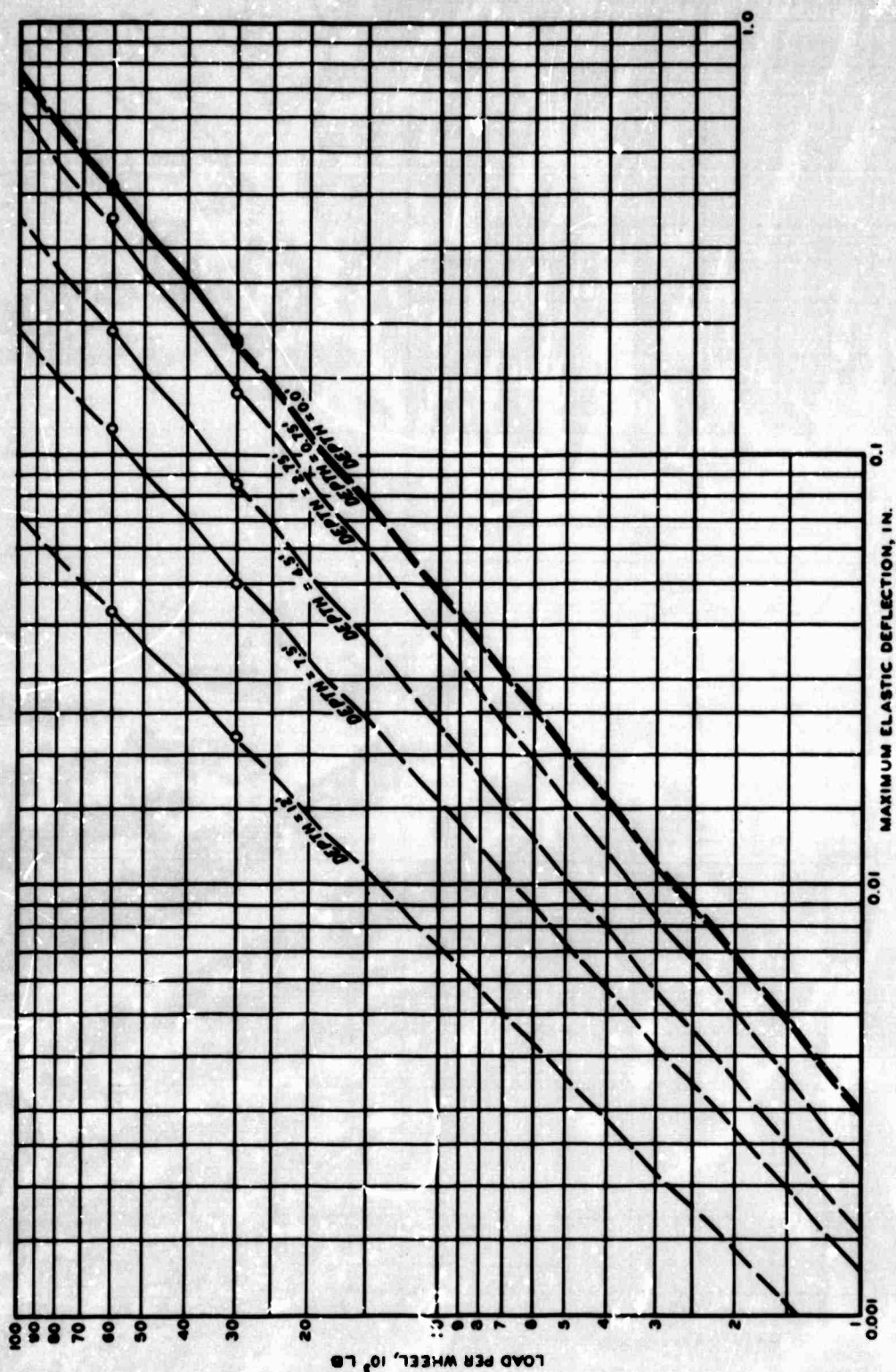


Figure 60. Wheel Load Versus Deflection for Static Load, Twin-Tandem Tests, Item 3, Flexible Pavement

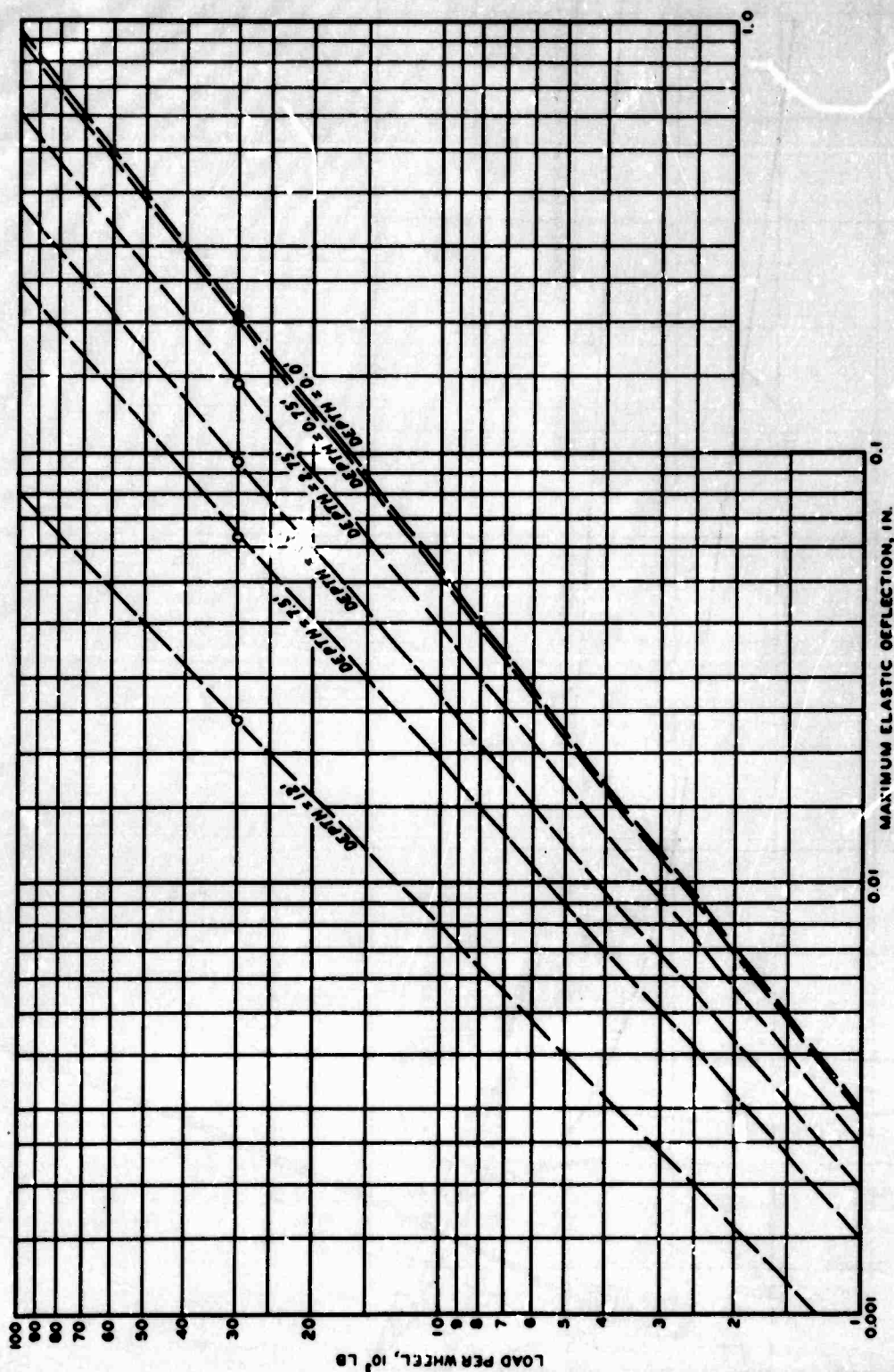
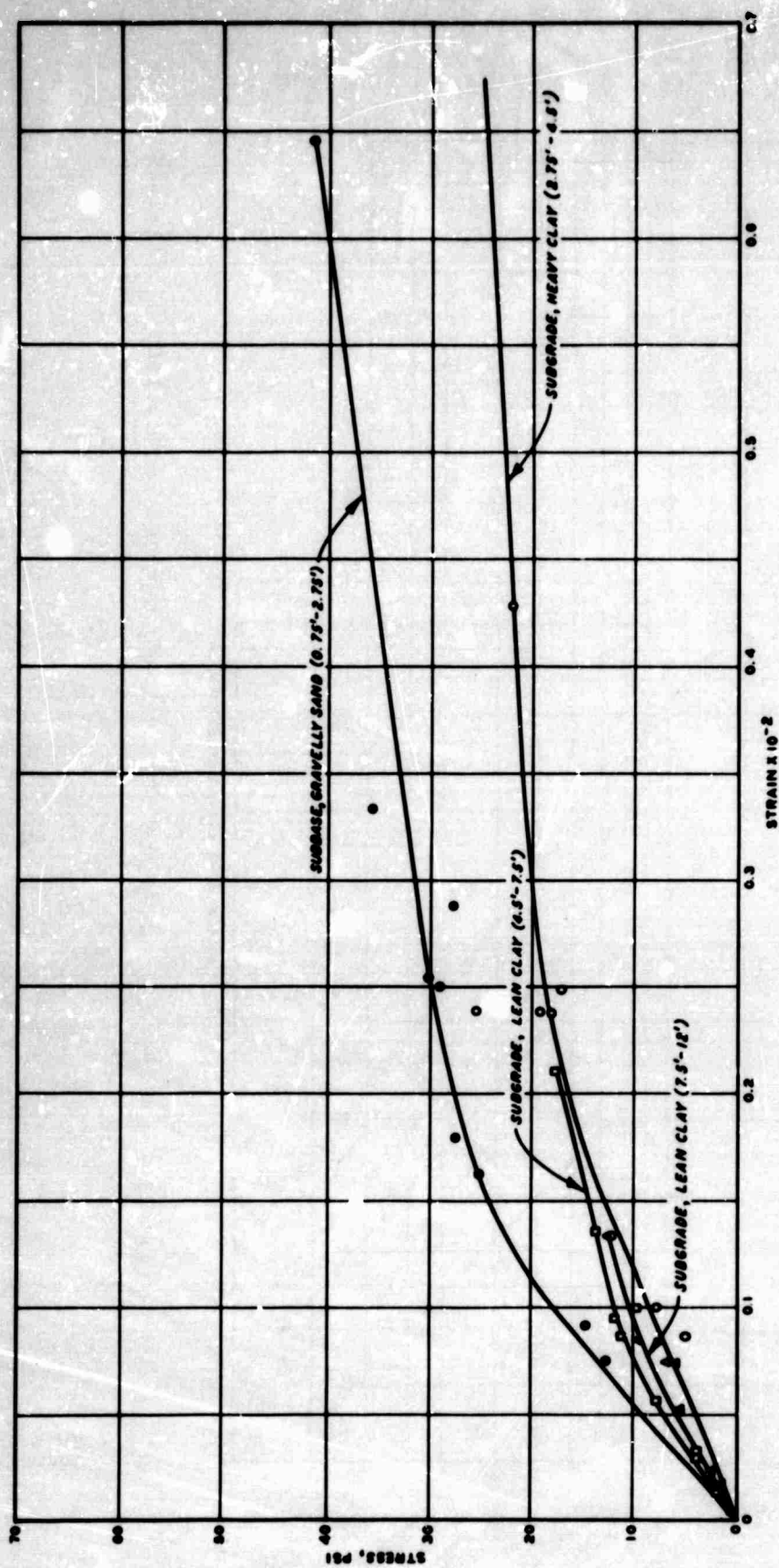


Figure 61. Wheel Load Versus Deflection for Static Load, 6-Wheel Tests, Item 3, Flexible Pavement

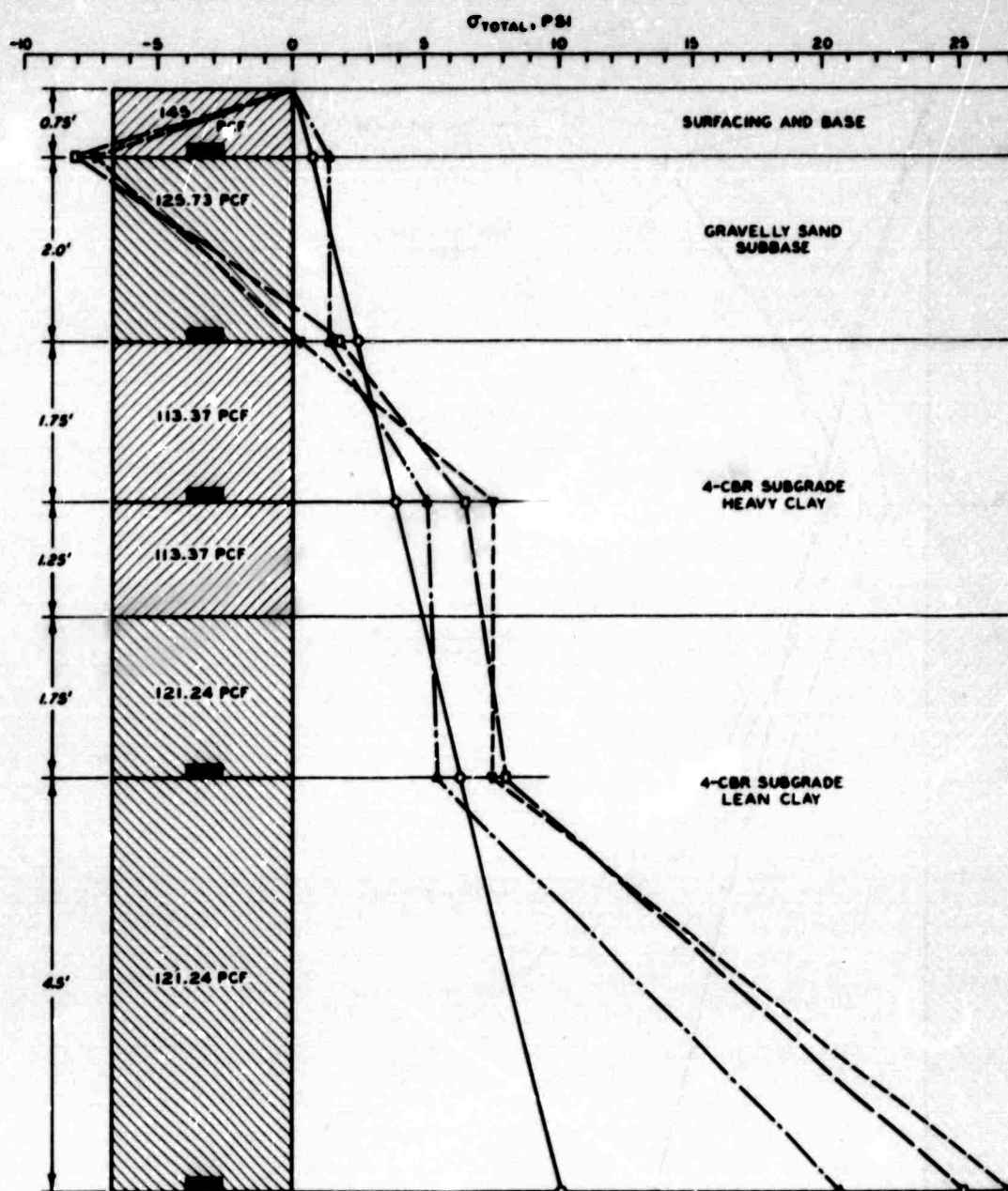


NOTE: STRESS IS STRESS AT MIDPOINT OF EACH LAYER.

Figure 62. Stress Versus Strain for Static Loading, All Wheel Assemblies, Item 3, Flexible Pavement

NOTE: Figure 63 is a folded sheet and is enclosed at the back of this volume.

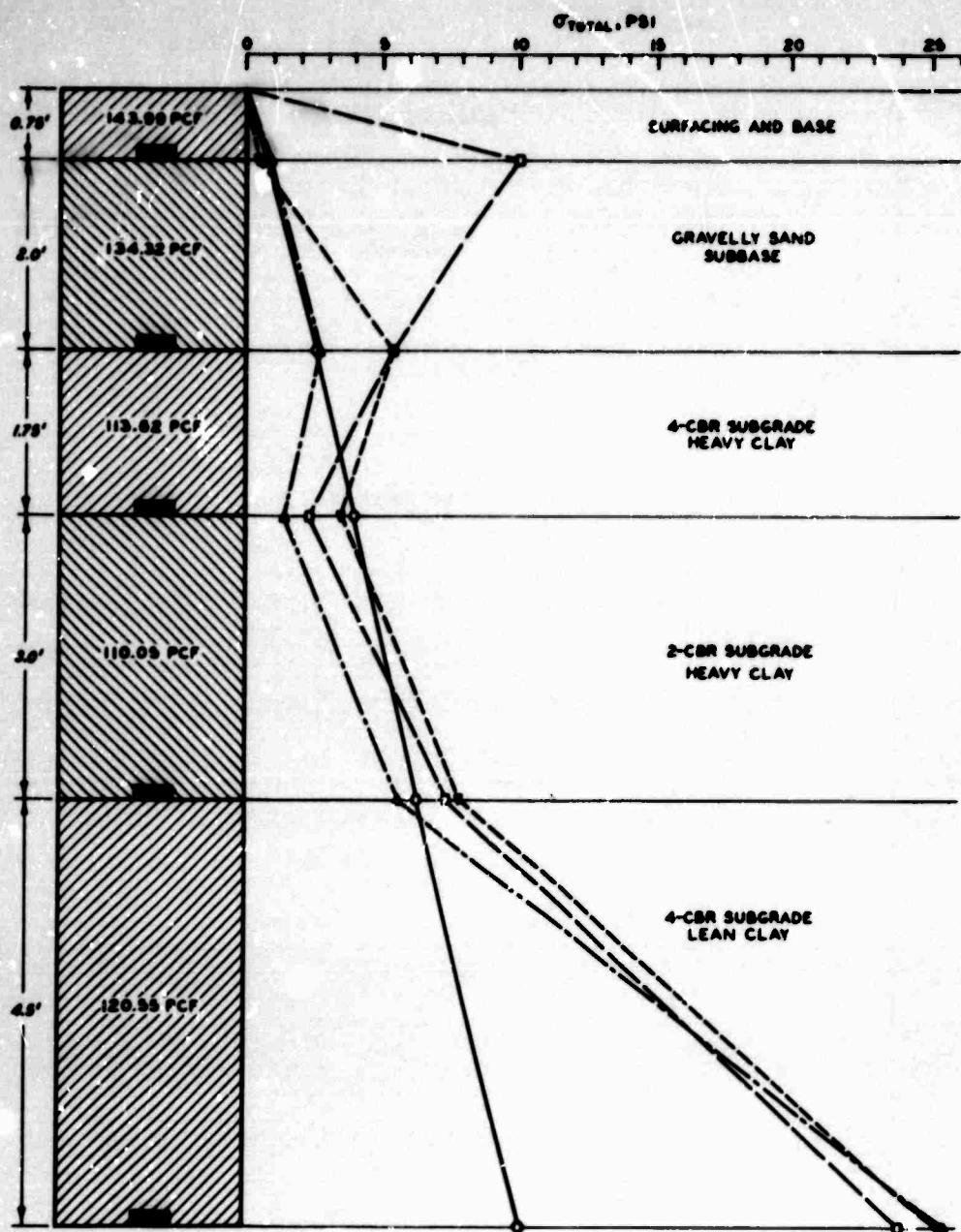
NOTE: Figure 64 is a folded sheet and is enclosed at the back of this volume.



LEGEND

- σ THEORETICAL OVERBURDEN PRESSURE
- - - Δ MEASURED AT BEGINNING OF TESTS
- ... \square MEASURED AT END OF TRAFFIC
- · - ∇ MEASURED 26 JAN 70
- SOIL PRESSURE CELL

Figure 65. Change in Total Stress σ_{total} with Depth, Item 3, Flexible Pavement



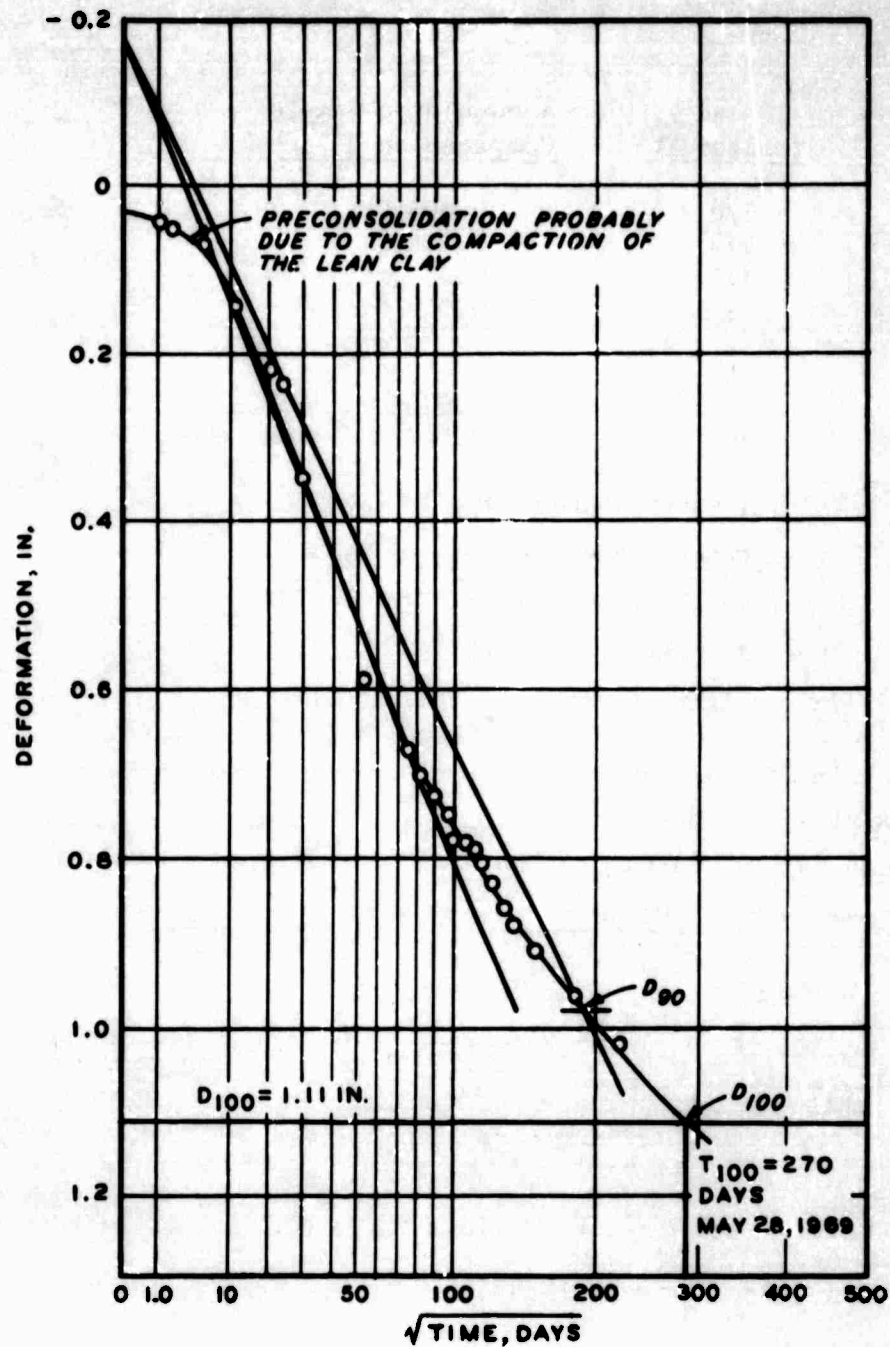
LEGEND

- THEORETICAL OVERBURDEN PRESSURE
- △- MEASURED AT BEGINNING OF TESTS
- MEASURED AT END OF TRAFFIC
- ▽- MEASURED 20 JAN 70
- SOIL PRESSURE CELL

Figure 66. Change in Total Stress σ_{total} with Depth, Item 4, Flexible Pavement

NOTE: Figure 67 is a folded sheet and is enclosed at the back of this volume.

NOTE: Figure 68 is a folded sheet and is enclosed at the back of this volume.



- D_{90} = Graphically determined point for 90 percent primary consolidation
- D_{100} = Graphical slope-ratio determined point of 100 percent primary consolidation
- T_{100} = Graphical slope-ratio determined time for 100 percent primary consolidation

Figure 69. Taylor Square-Root-of-Time Fitting Method Applied to Field Deflection Data for a Deflection Gage at 7.50-ft Depth, Flexible Pavement Test Section

Load tons/sq ft	Accumulated Sample Compression H, in.
1/8	0.00340
1/4	0.00632
1/2	0.01108
1	0.01840
2	0.02970
4	0.04240
8	0.07620
12	0.09270

Initial water content $w_1, \%$ 22.5
 Final water content $w_f, \%$ 18.4
 Final weight of solids w_s, gm 442.32
 Specific gravity of solids G_s 2.69
 Unit weight of water $\gamma_w, gm/cc$ 1

To find initial void ratio, e_o :

Assume soil fills ring at end of test

$$\begin{aligned} \text{Final total volume } V_T &= (\text{Area of sample} \times (\text{Final sample height})) \\ &= \frac{91.52 \text{ cm}^2}{6.45 \text{ cm}^2/\text{in}^2} (1.0614 \text{ in.}) \text{ or } 15.1 \text{ in}^3 \end{aligned}$$

$$\begin{aligned} \text{Final volume of solids } V &= \frac{W_s}{G_s \gamma_w} = \frac{442.32 \text{ gm}}{(2.69)(1 \text{ gm/cc})(16.38 \text{ cm}^3/\text{in}^3)} \\ &= \frac{442.32}{44.1} \text{ in}^3 \text{ or } 10.1 \text{ in}^3 \end{aligned}$$

$$\text{Final volume of voids } V = V_T - V = 15.1 \text{ in}^3 - 10.1 \text{ in}^3 \text{ or } 5 \text{ in}^3$$

$$\text{Initial height of solids } H_s = 0.7074 \text{ in.}$$

$$\text{Final height of solids change after test or load involvement } \Delta H = 0.0927 \text{ in.}$$

$$\text{Final void ratio change } \Delta e = \frac{\Delta H}{H_s} = \frac{0.0927}{0.7074} \text{ or } 0.131$$

$$\text{Final void ratio } e_{\text{final}} = \frac{V_T - V_s}{V_s} = \frac{V}{V} = \frac{5}{10.1} \text{ or } 0.499$$

$$\text{Initial void ratio } e_o = e_f + \Delta e = 0.499 + 0.131 \text{ or } 0.630$$

Figure 70. Laboratory Consolidation Test of Lean Clay (CL) from the Sub-grade of Item 3, Flexible Pavement Test Section

Tare No.	Before Test		After Test	
	All	Steps	All	
Ring & Plates	15	49	49	
Tare + Wet Soil. grams	1759.2	315.51	650.06	643.13*
Tare + Dry Soil. grams	(1661.3)	278.62	561.65	561.65
Weight of Water. grams	$W_{wo} = 97.9$	36.89	88.41	$W_{wf} = 81.48$
Tare Weight. grams	1218.0	119.06	119.33	119.33
Weight of Solid. grams	(442.3)	159.56	442.32	$W_s = 442.32$
Water Content. percent	$W_o = 22.1$ %	23.1		$W_f = 18.4$ %

*Correction =
6.93 grams

Consolidometer No. K Area, $A = 91.52$ cm² Height, $H = 1.154$ in.

Weight of Ring 1218.0 gm Weight of Plates Nos. --- gm.

Specific gravity of Solids, $s_s = 2.69$ est

Height of Solids, $H_s = \frac{W_s}{A \times s_s \times \gamma_w} = \frac{442.32}{2.54 \times 91.52 \times 2.69 \times 1} = 0.7074$ in.

Original Height of Water, $H_{wo} = \frac{W_{wo}}{A \times \gamma_w} = \frac{97.9}{2.54 \times 91.52 \times 1} = 0.4211$ in.

Final Height of Water, $H_{wf} = \frac{W_{wf}}{A \times \gamma_w} = \frac{81.48}{2.54 \times 91.52 \times 1} = 0.3505$ in.

Net Change in height of Specimen at end of test, $\Delta H = 0.0927$ in.

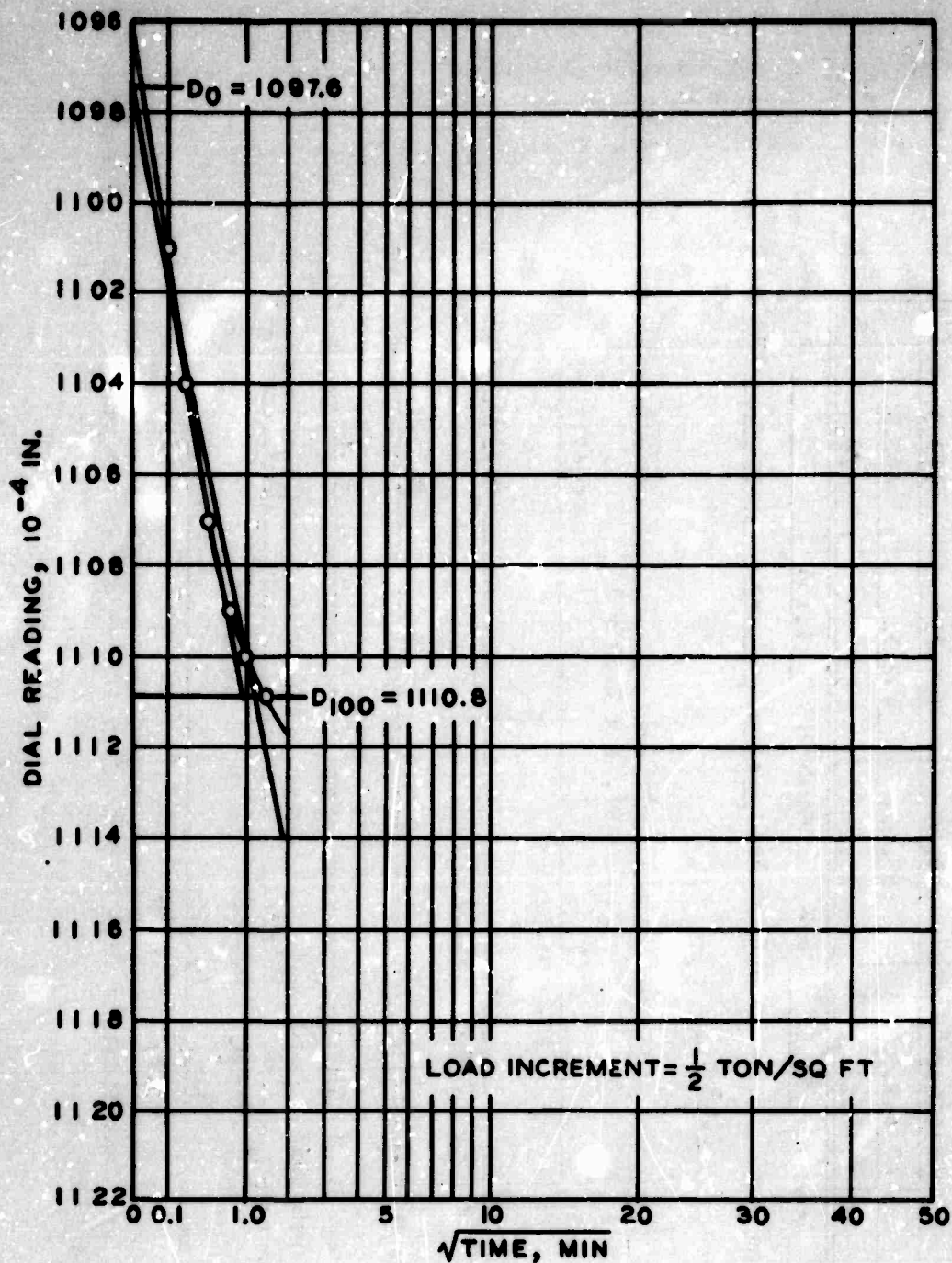
Height of Specimen after test, $H_f = H + \Delta H = 1.0613$ in.

Specimen did not rebound

Degree of Saturation before test, $G_o = \frac{H_{wo}}{H - H_s} = \frac{0.4211}{0.4466} = 94.3$ %

Degree of Saturation after test, $G_f = \frac{H_{wf}}{H_f - H_s} = \frac{0.3505}{0.3540} = 99.0$ %

Figure 71. Data Sheet for Consolidation Test of Lean Clay (CL) from the Subgrade of Item 3, Flexible Pavement Section



D_0 = Value obtained for corrected primary consolidation zero point according to the Terzaghi theory

D_{100} = Graphical slope-ratio determined point of 100 percent primary consolidation

Figure 72. Taylor Square-Root-of-Time for Consolidation Tests of Lean Clay (CL) from the Flexible Pavement Test Section

Initial void ratio $e_o = 0.630$

Load tons/sq ft	Void Ratio Change, Δe	Void Ratio e
1/8	0.00481	0.6252
1/4	0.00893	0.6211
1/2	0.01566	0.6143
1	0.02601	0.6040
2	0.04198	0.5880
4	0.05994	0.5701
8	0.10772	0.5223
12	0.13104	0.4990

$$\text{Coefficient of consolidation } C_v = \frac{T_{90} H_d^2}{t_{90}} = \frac{(0.848)(0.572)^2}{1 \text{ min}}$$

$$= 0.277 \text{ in}^2/\text{min} \text{ or } 0.0298 \text{ cm}^2/\text{sec}$$

where

Time factor in Terzaghi theory corresponding to 90 percent consolidation $T_{90} = 0.848$

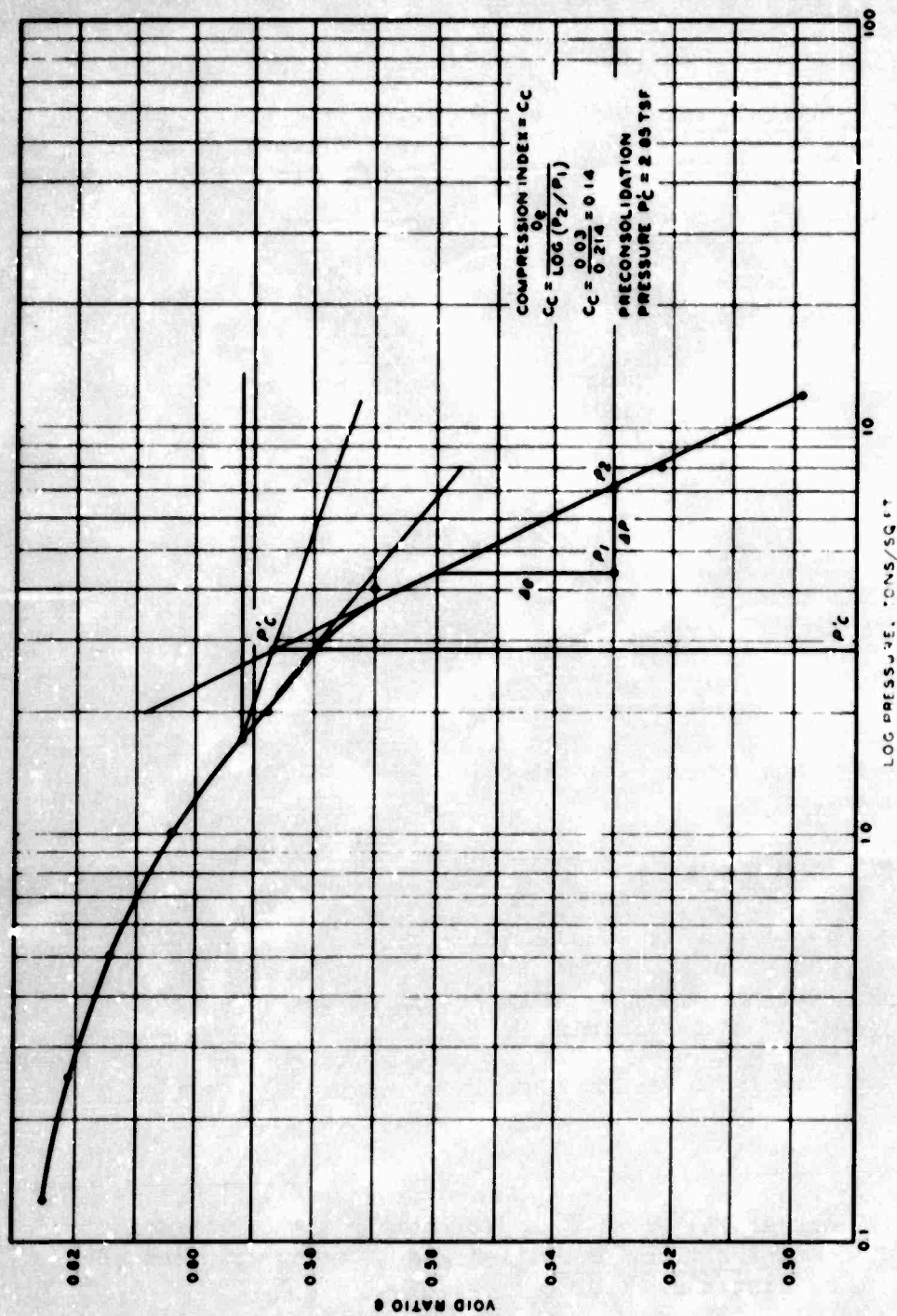
$$\text{Maximum drainage length } H_d = \frac{H_s - \Delta H}{2} = \frac{1.154 - 0.0111}{2}$$

or 0.5715 in.

Laboratory consolidation test time at 90 percent primary consolidation $t_{90} = 1 \text{ min}$

Note: At a load of 1/2 ton/sq ft, which is approximately the overburden pressure at the elevation of the first deflection gage, the coefficient of consolidation $C_v = 0.277 \text{ in}^2/\text{min}$.

Figure 73. Determination of Coefficient of Consolidation from Data Shown in Figure 70



C_c = Compression index
 e = Void ratio
 P = Applied pressure
 P'_c = Preconsolidation pressure
 ΔP = Pressure increment ($P_2 - P_1$)
 Δe = Void ratio change in an increment ($e_1 - e_2$)

Figure 74. Void Ratio Versus Log of Consolidation Pressure. Lean Clay (CL) from the Flexible Pavement Test Section

Using an ultimate field settlement $\Delta h_{\text{final}} = 1.5 \text{ in.}$

Δh_U = Field settlement at U percent consolidation

T_U = Time factor for U percent consolidation from Terzaghi theory

t_U = Field time for U percent consolidation to occur

$$t_U = T_U \left(H_d^2 / C_v \right)$$

where

Coefficient of consolidation $C_v = 0.277 \text{ in.}^2/\text{min} = 0.0298 \text{ cm}^2/\text{sec}$

Drainage length $H_d = 4.5 \text{ ft}$ (Drained only at bottom of layer)

$$H_d^2 / C_v = (4.5 \text{ ft})^2 / 0.277 \text{ in.}^3/\text{min} = 10,520 \text{ min}$$

$$t_U = T_U \times 10,520 \text{ min}$$

U Percent Consolidation	Field Settlement Δh_U , in.	Time Factor T_U	Field Time t_U	
			minutes	days
0	0	0	0	0
0.1	0.15	0.0077	81	
0.2	0.30	0.0314	331	
0.3	0.45	0.0707	745	
0.4	0.60	0.126	1,327	
0.5	0.75	0.196	2,065	
0.6	0.90	0.286	3,015	
0.7	1.05	0.403	4,240	
0.8	1.20	0.567	5,975	
0.9	1.35	0.848	8,940	
0.95	1.43	1.129	11,900	8.3
1.0	1.50	∞	∞	∞

Figure 75. Computation of Field Rate of Consolidation

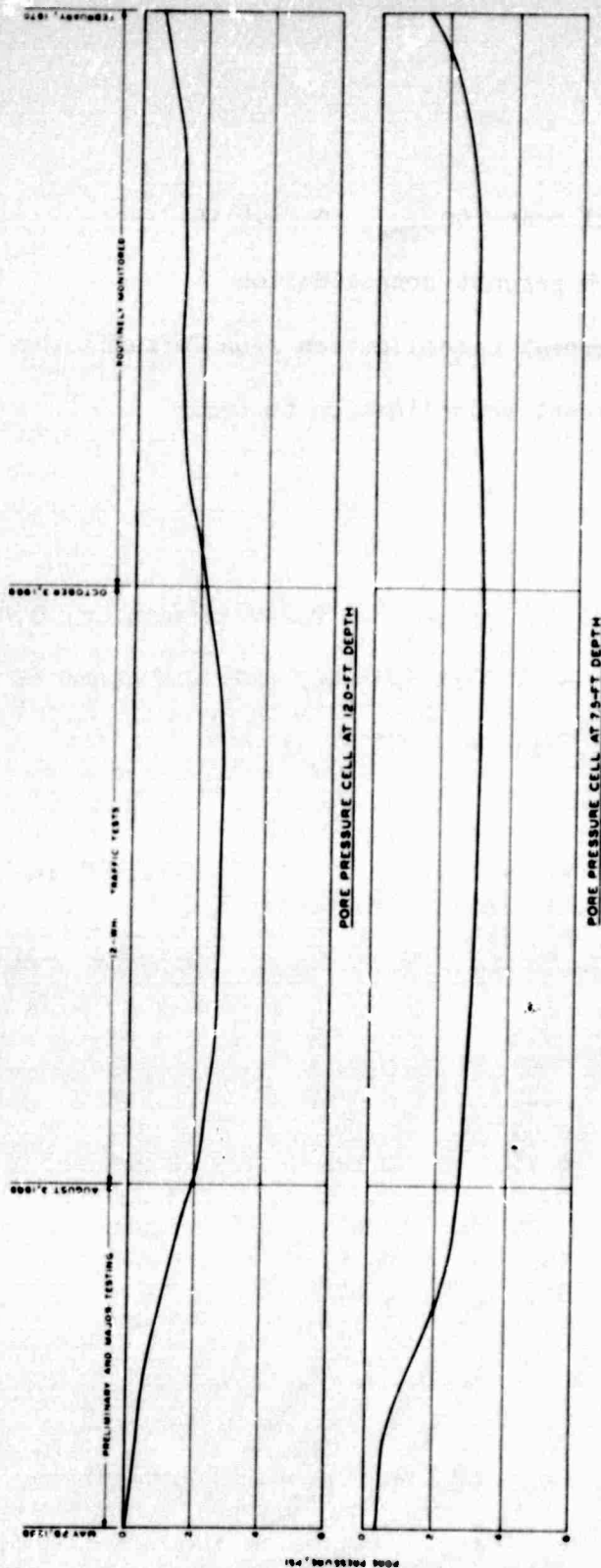


Figure 76. Pore Pressure Histories, Item 3, Flexible Pavement

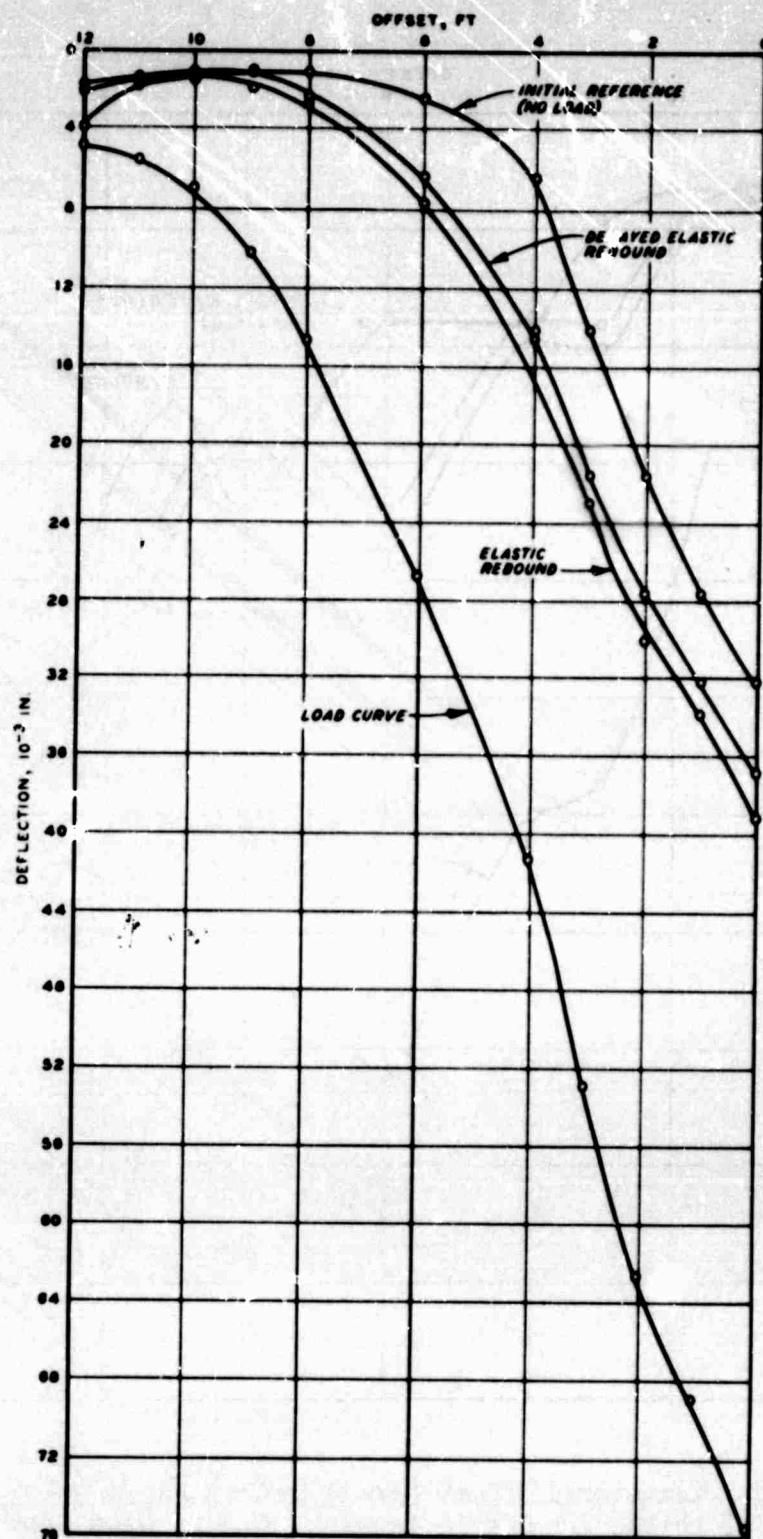


Figure 77. Transverse Offset Versus Deflection at 7.5-ft Depth, for Static Loading, Assembly Load Point 1, 12-Wheel, 360-kip Load, Item 3, Flexible Pavement

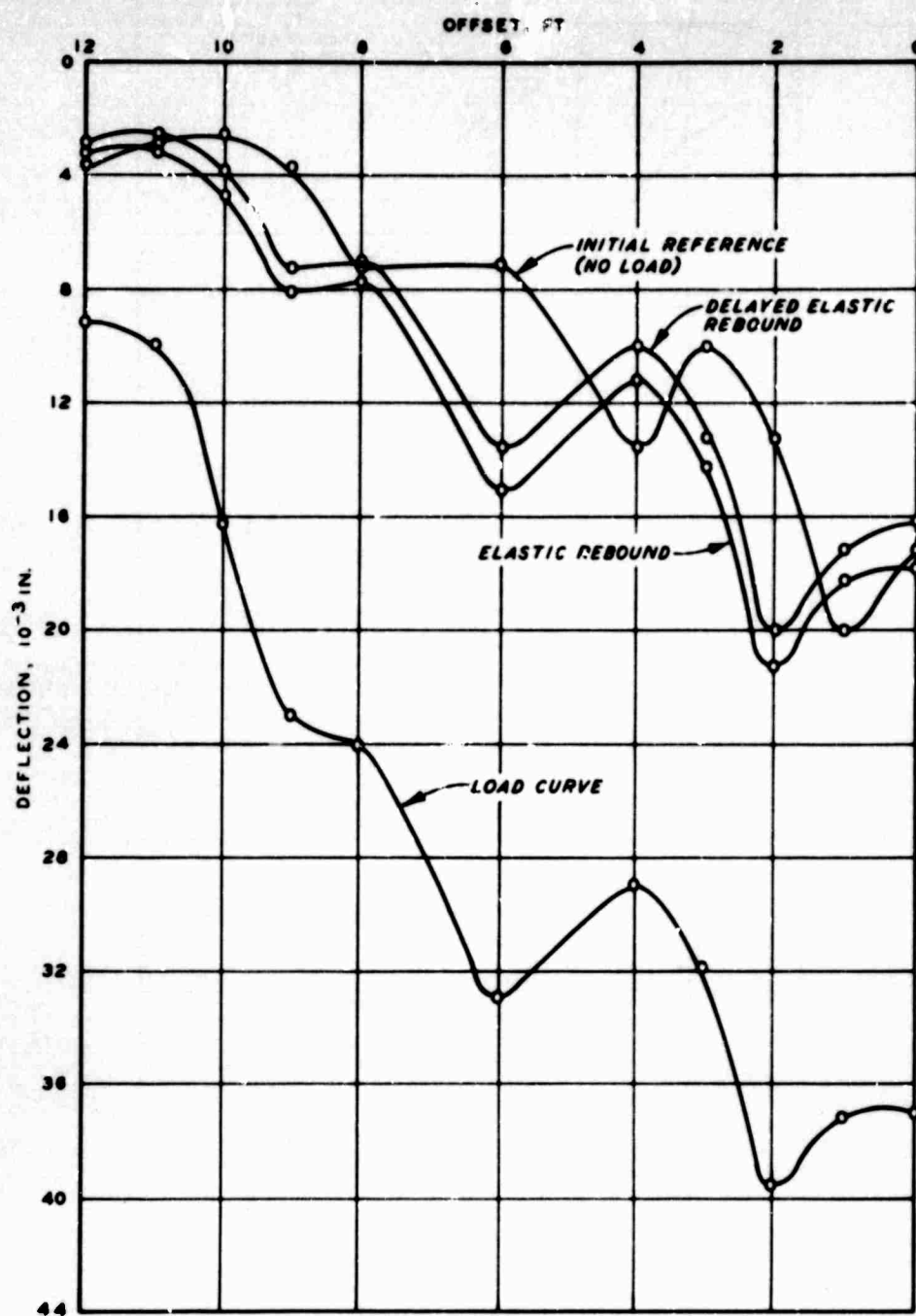
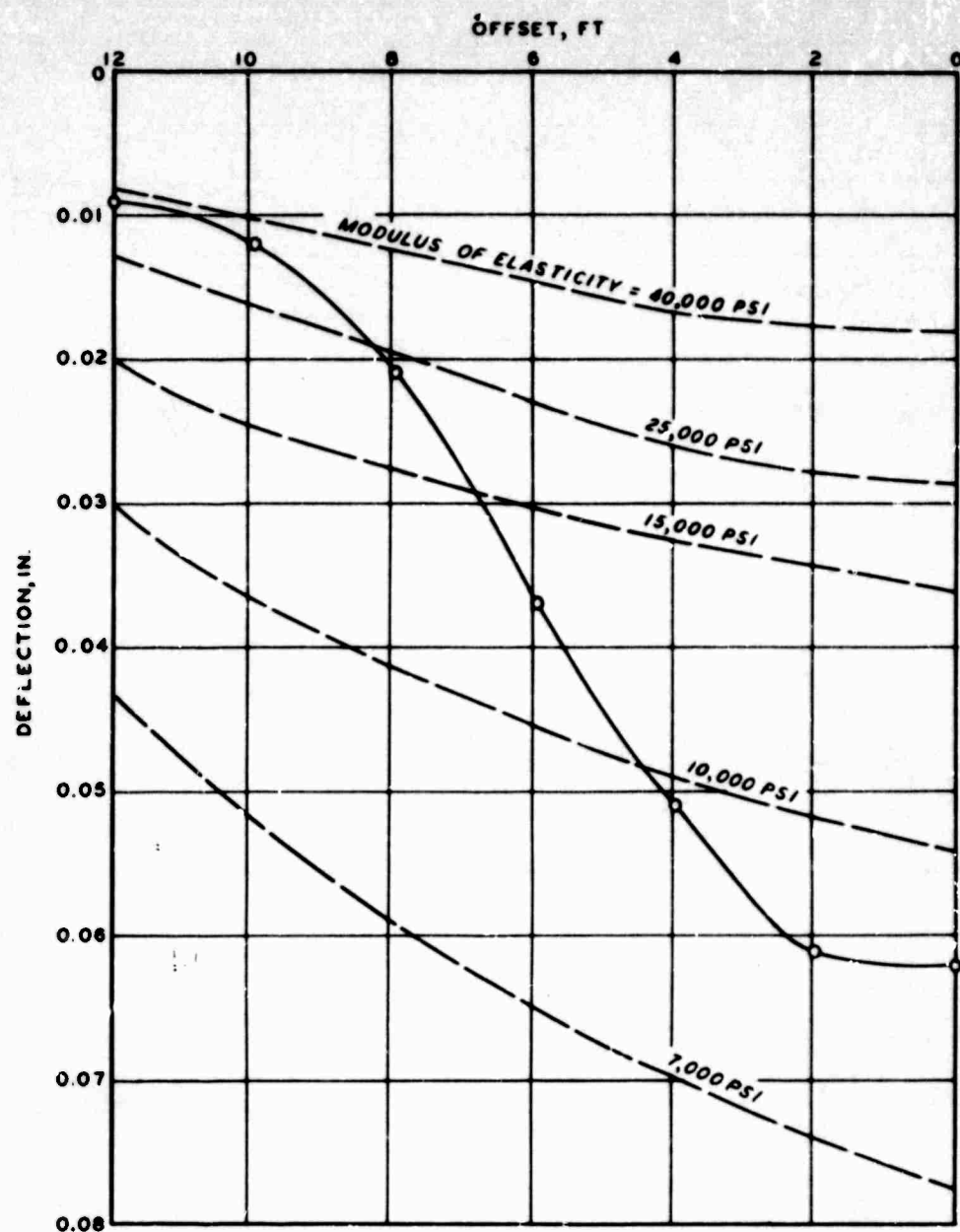


Figure 78. Transverse Offset Versus Deflection at 0.75-ft Depth, for Static Loading, Assembly Load Point 1, 12-Wheel, 360-kip Load, Item 3, Flexible Pavement



LEGEND

——— ACTUAL
 MEASURED
 DATA
 ——— THEORETICAL
 CURVE

Figure 79. Transverse Offset Versus Theoretical and Measured Deflection at 7.5-ft Depth, 6-Wheel, 180-kip Load, Static Load Test, Item 3, Flexible Pavement

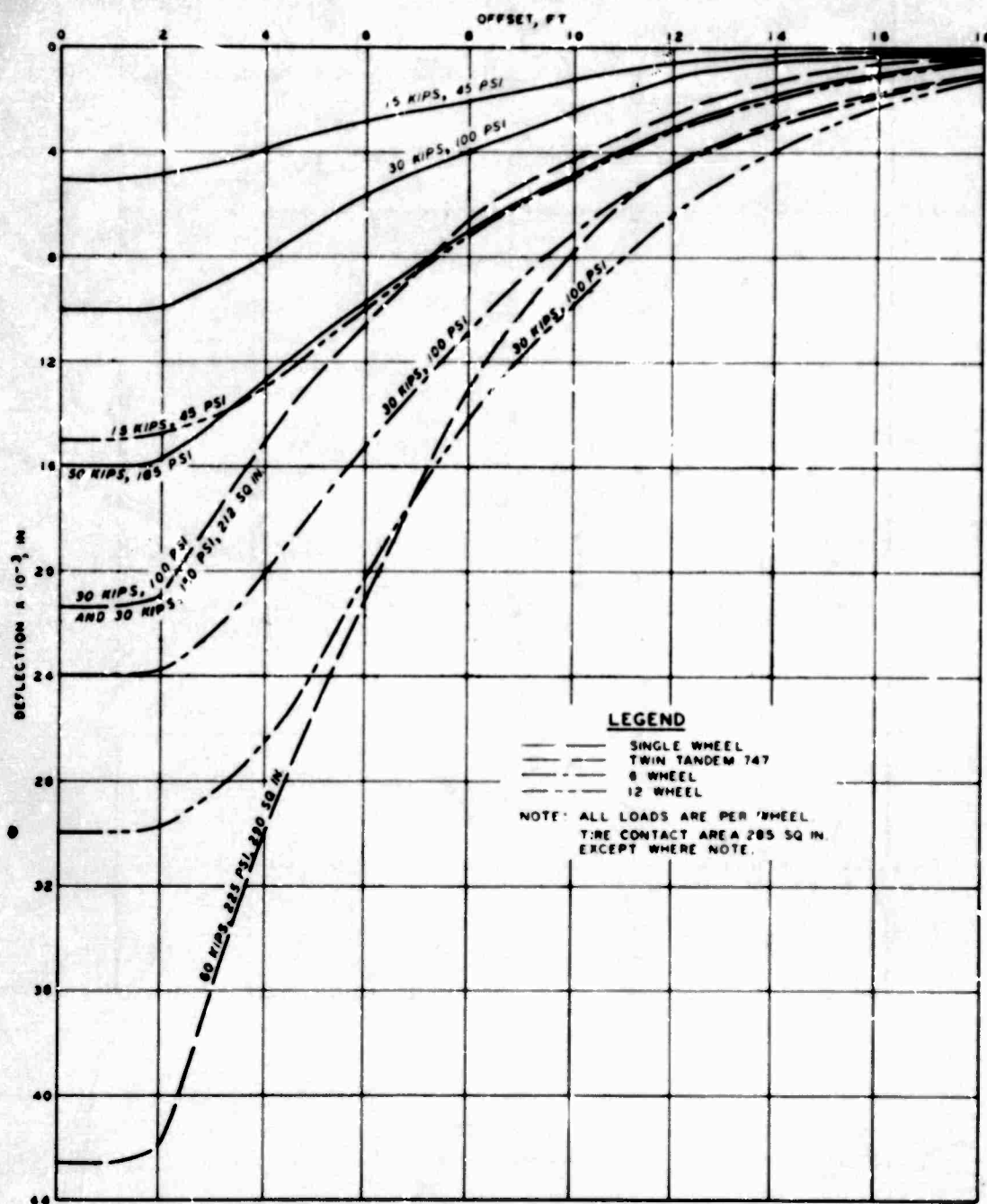


Figure 80. Transverse Offset Versus Deflection at 12-ft Depth, All Assemblies, Flexible Pavement Tests

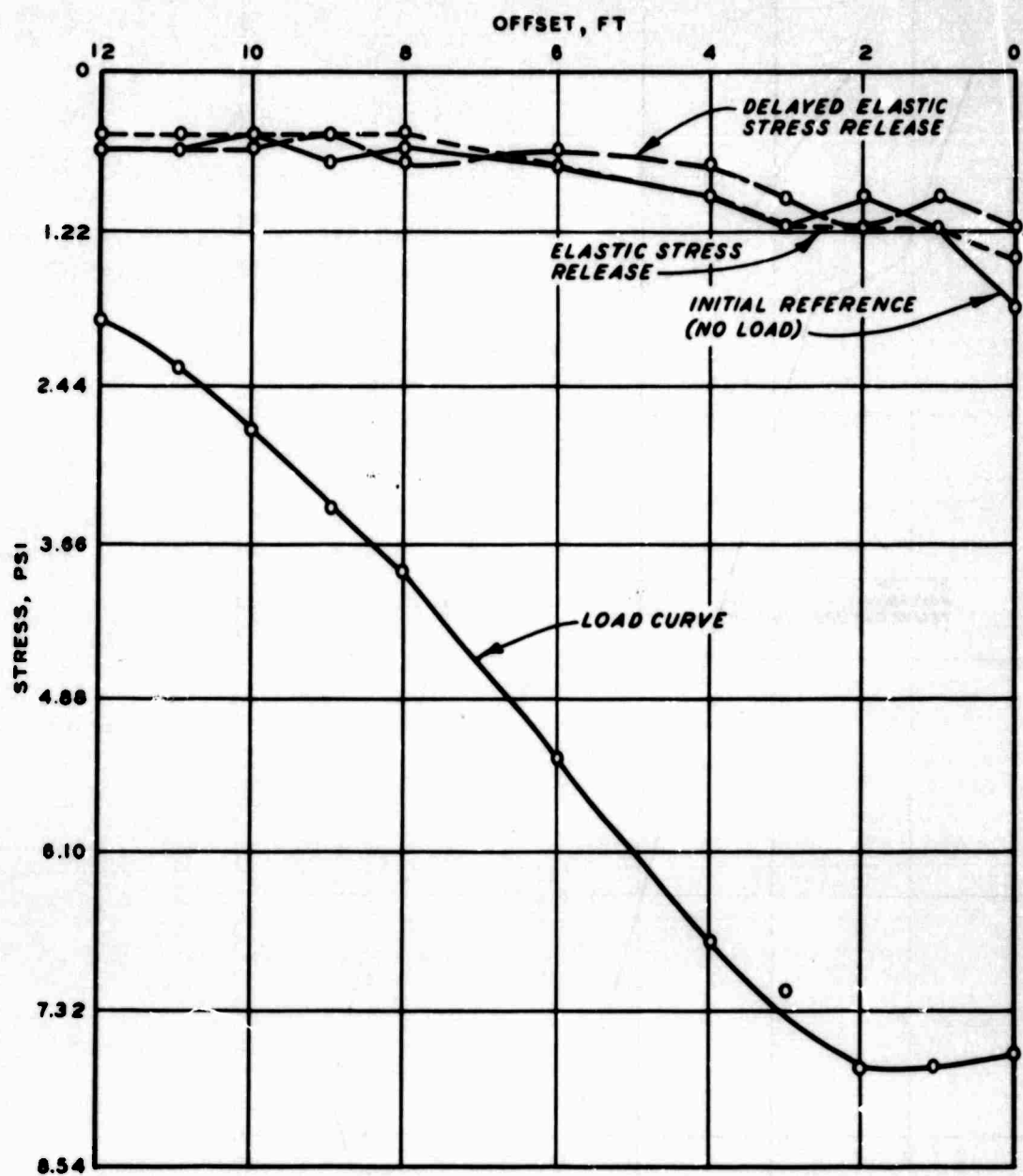


Figure 81. Transverse Offset Versus Stress at 12-ft Depth for Static Loading, Assembly Load Point 1, 12-Wheel, 360-kip Load, Item 3, Flexible Pavement

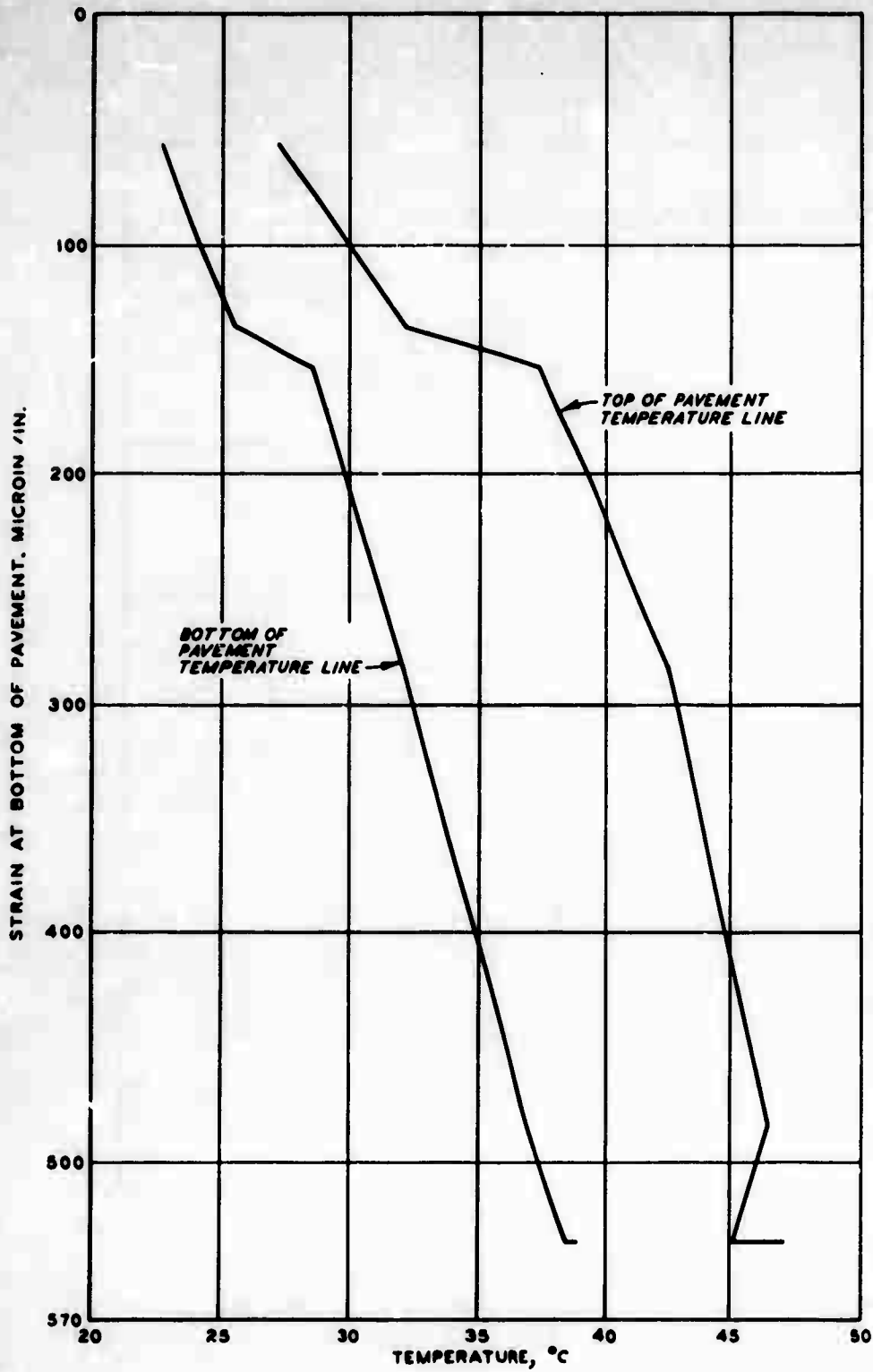


Figure 82. Temperature Versus Strain, Flexible Pavement

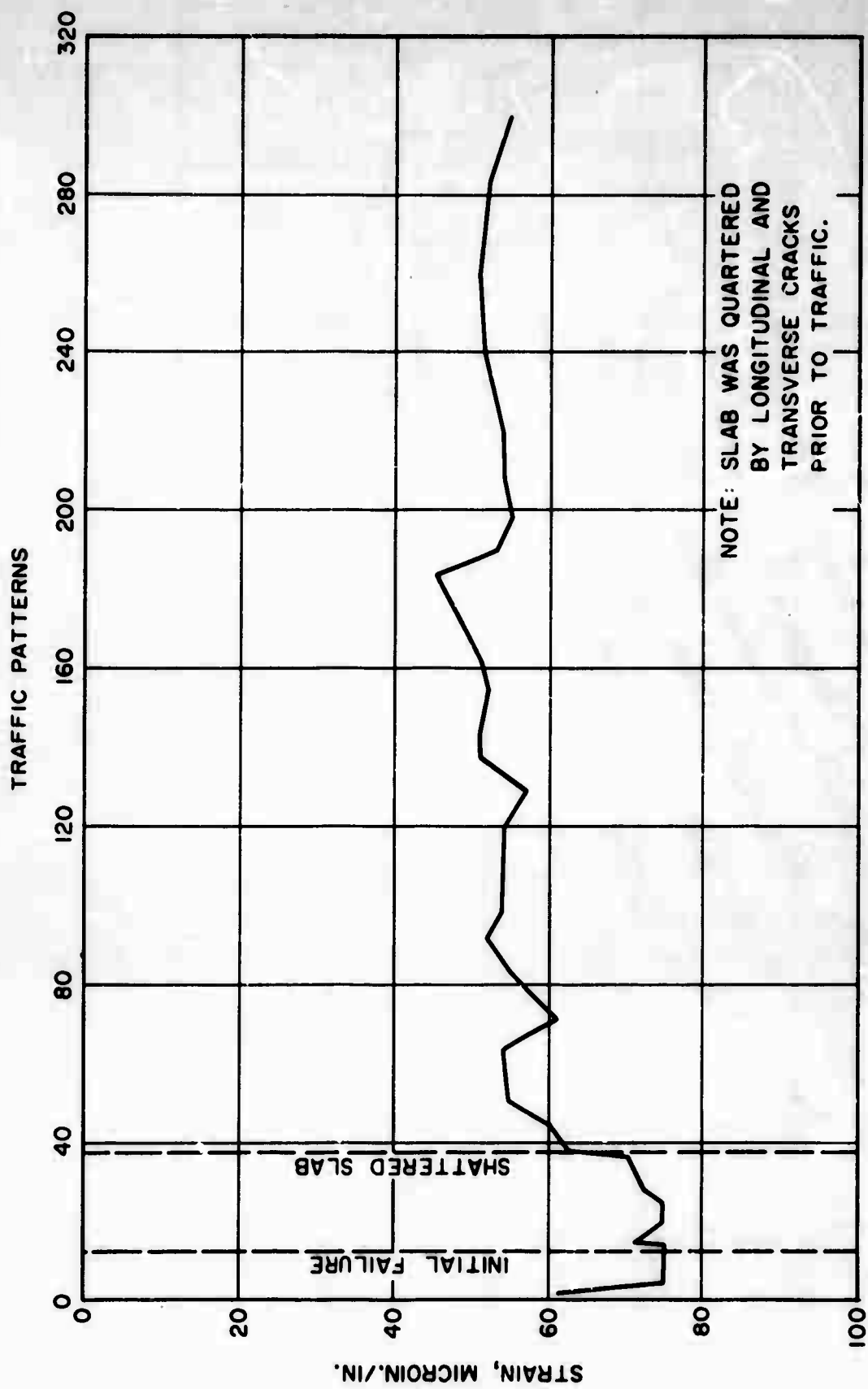


Figure 83. Strain Versus 12-Wheel Traffic Level, Gage 1SCL, Offset No. 1, SW Slab, Item 1, Rigid Pavement Test Section

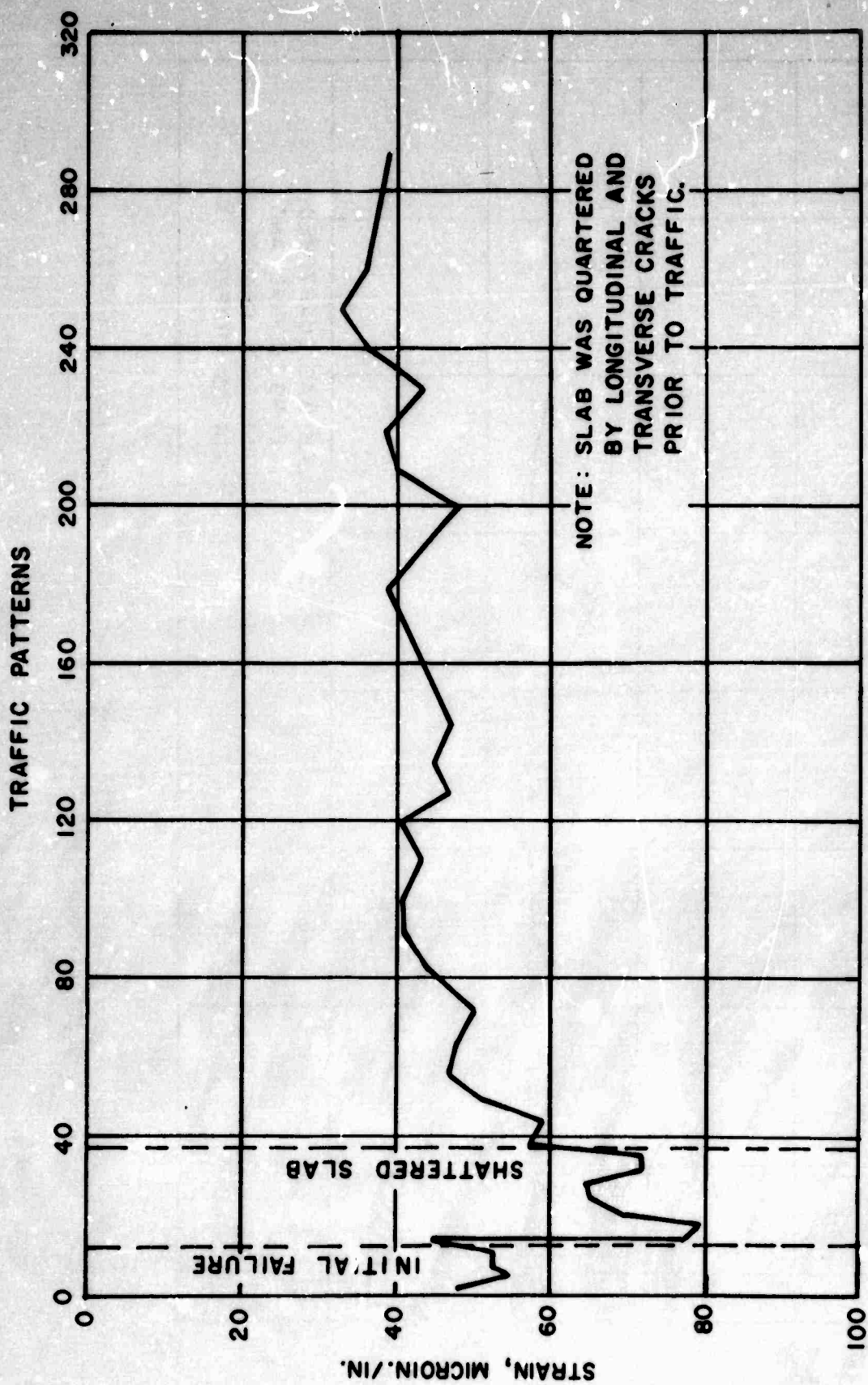


Figure 84. Strain Versus 12-Wheel Traffic Level, Gage 1SCT, Offset No. 1, SW Slab, Item 1, Rigid Pavement Test Section

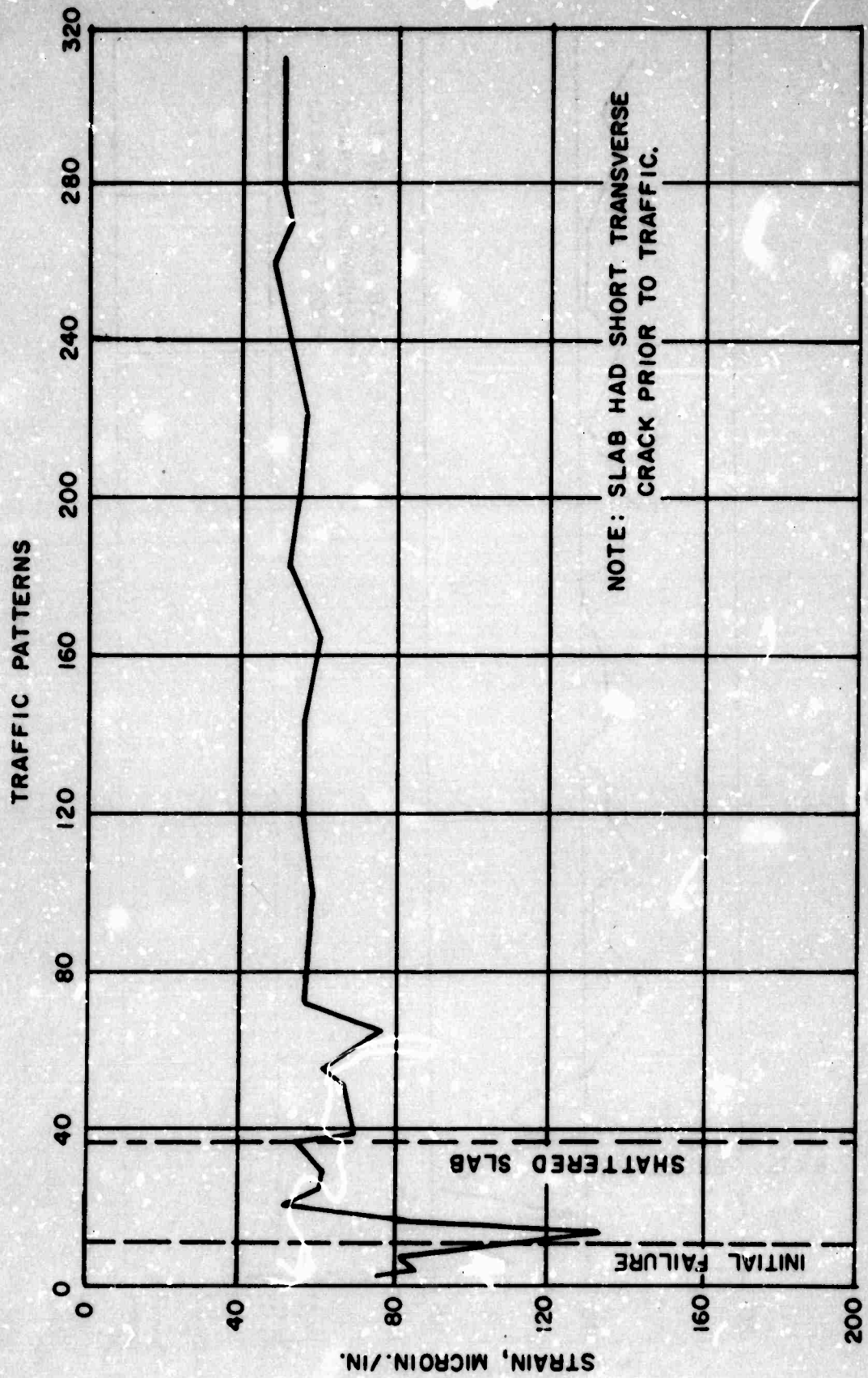


Figure 85. Strain Versus 12-Wheel Traffic Level, Gage 1SNJL, Offset No. 4, NW Slab, Item 1, Rigid Pavement Test Section

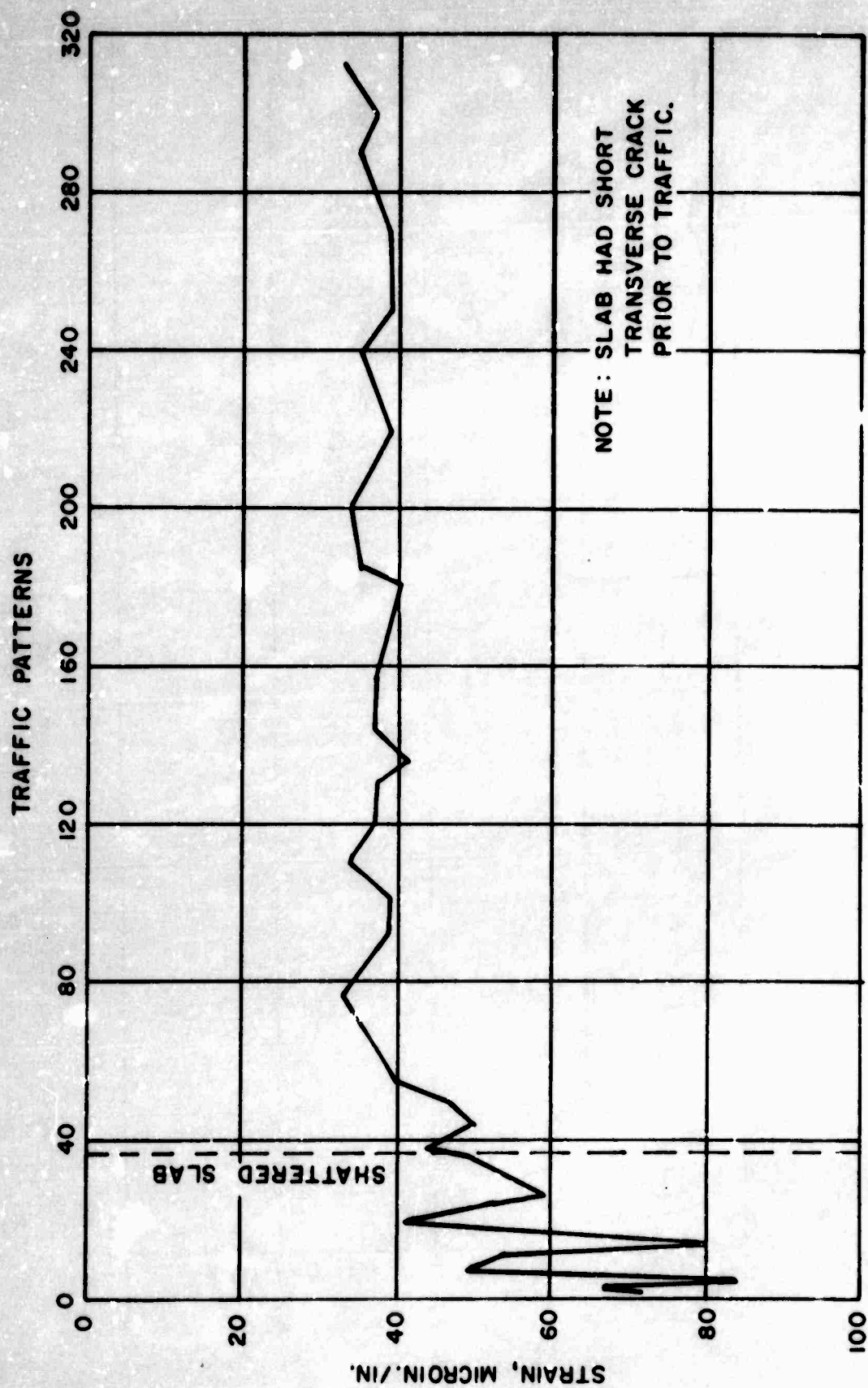


Figure 86. Strain Versus 12-Wheel Traffic Level, Gage 1SNJL, Offset No. 5, NW Slab, Item 1, Rigid Pavement Test Section

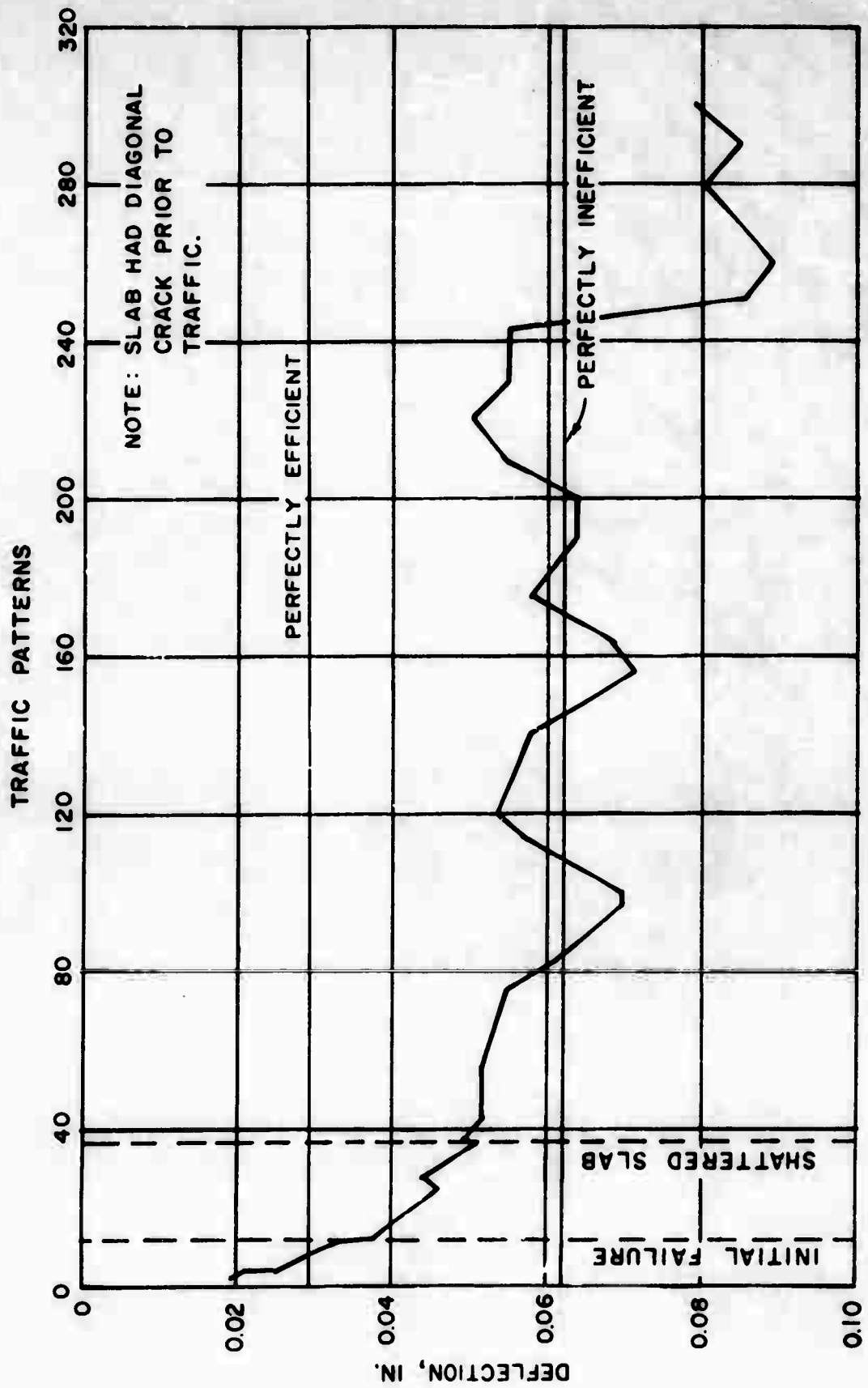


Figure 87. Deflection Versus 12-Wheel Traffic Level, Gage 13PD, Offset No. 5, SE Slab, Item 1, Rigid Pavement Test Section

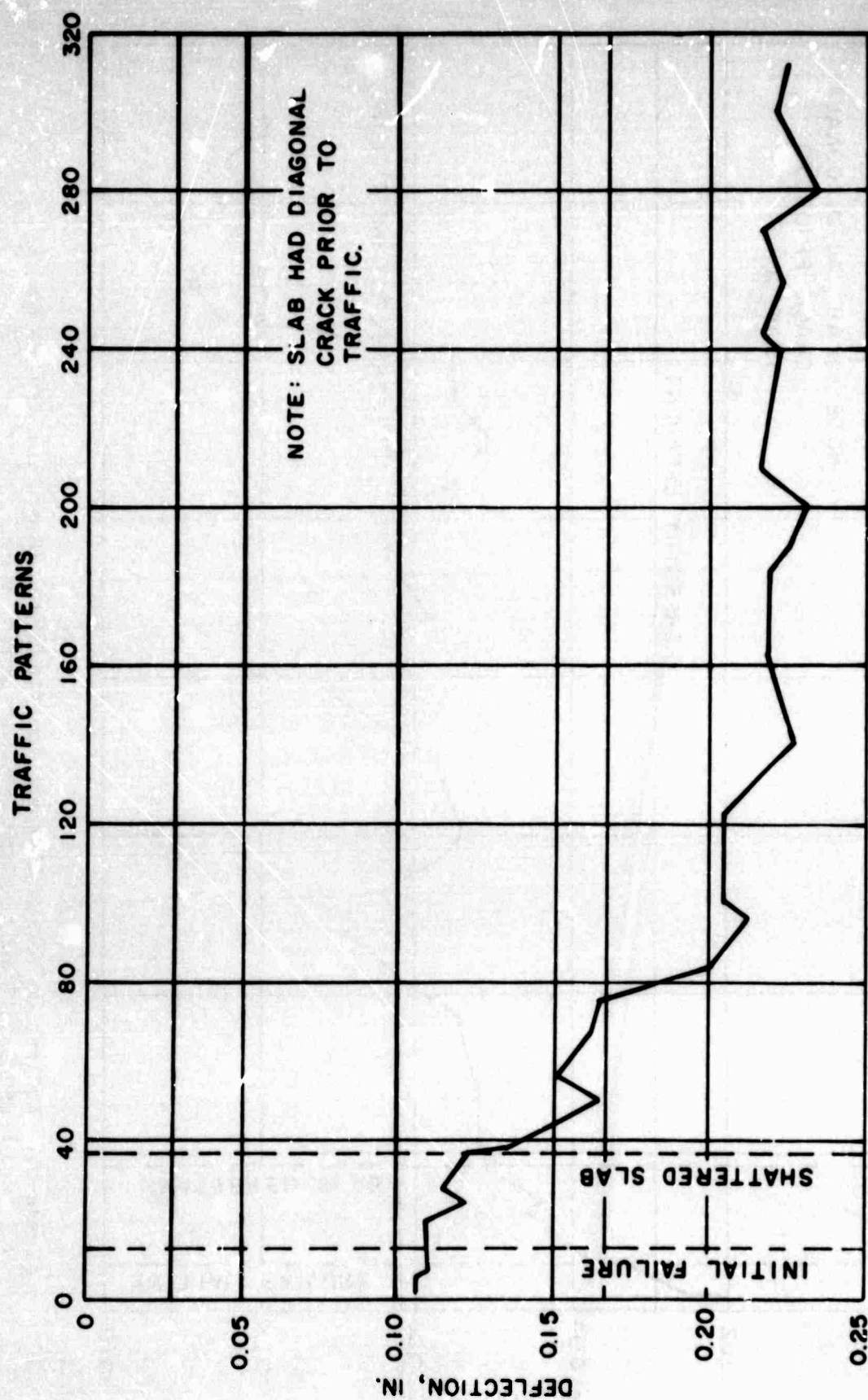


Figure 88. Deflection Versus 12-Wheel Traffic Level, Gage 19PD, Offset No. 5, SE Slab, Item 1, Rigid Pavement Test Section

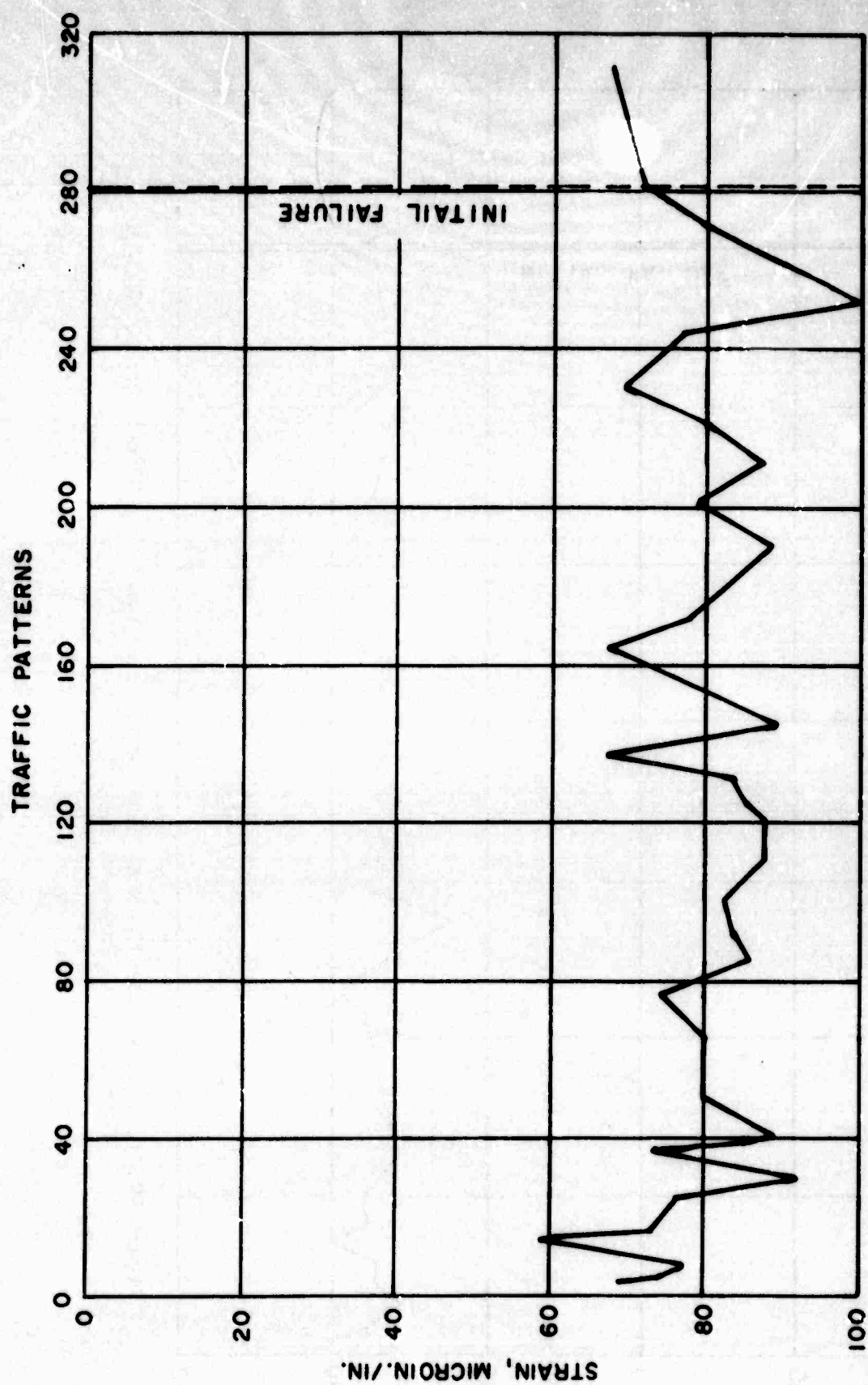


Figure 89. Strain Versus 12-Wheel Traffic Level, Gage 2SCT, Offset No. 1, SW Slab, Item 2, Rigid Pavement Test Section

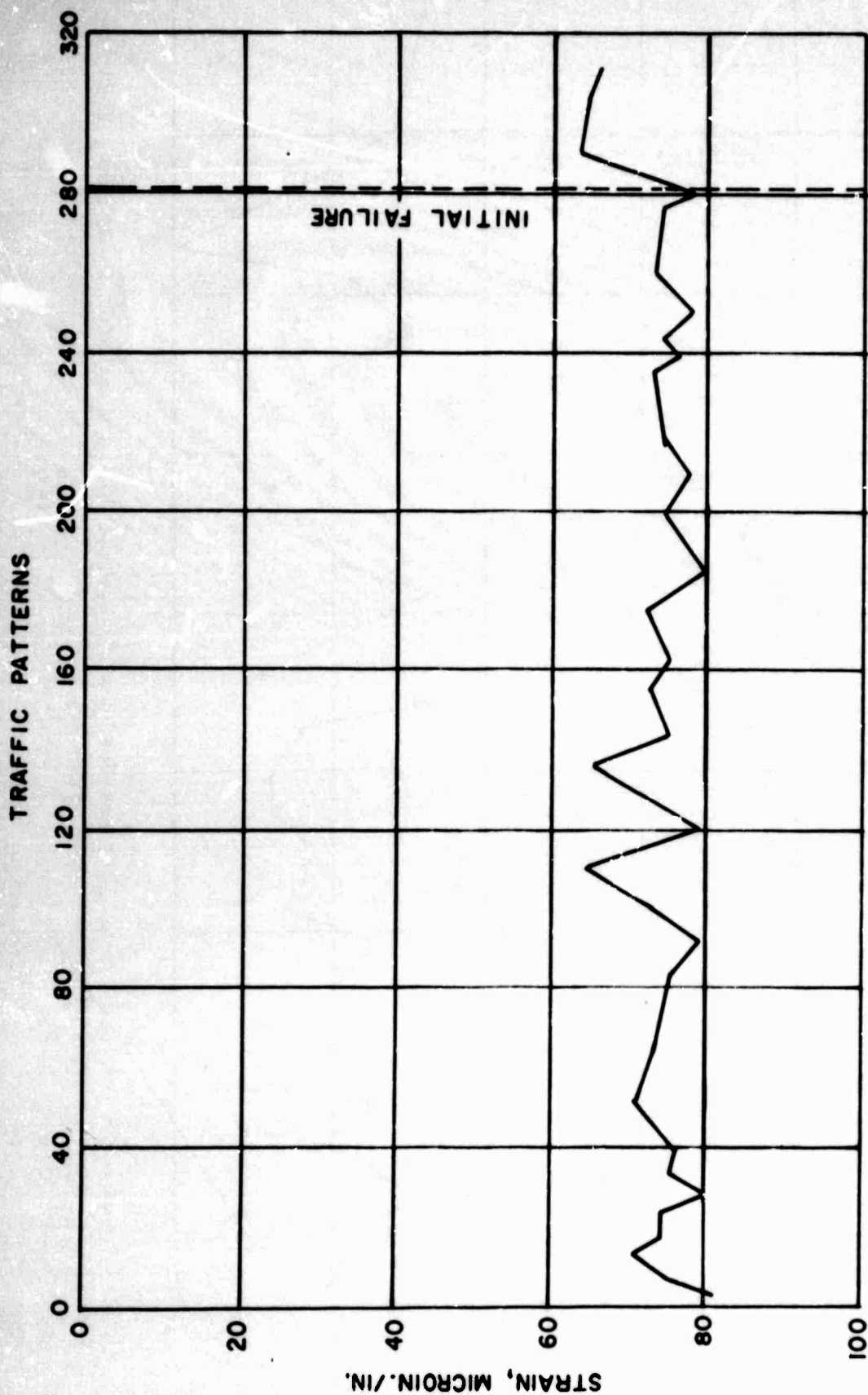


Figure 90. Strain Versus 12-Wheel Traffic Level, Gage 2SCL, Offset No. 1, SW Slab, Item 2, Rigid Pavement Test Section

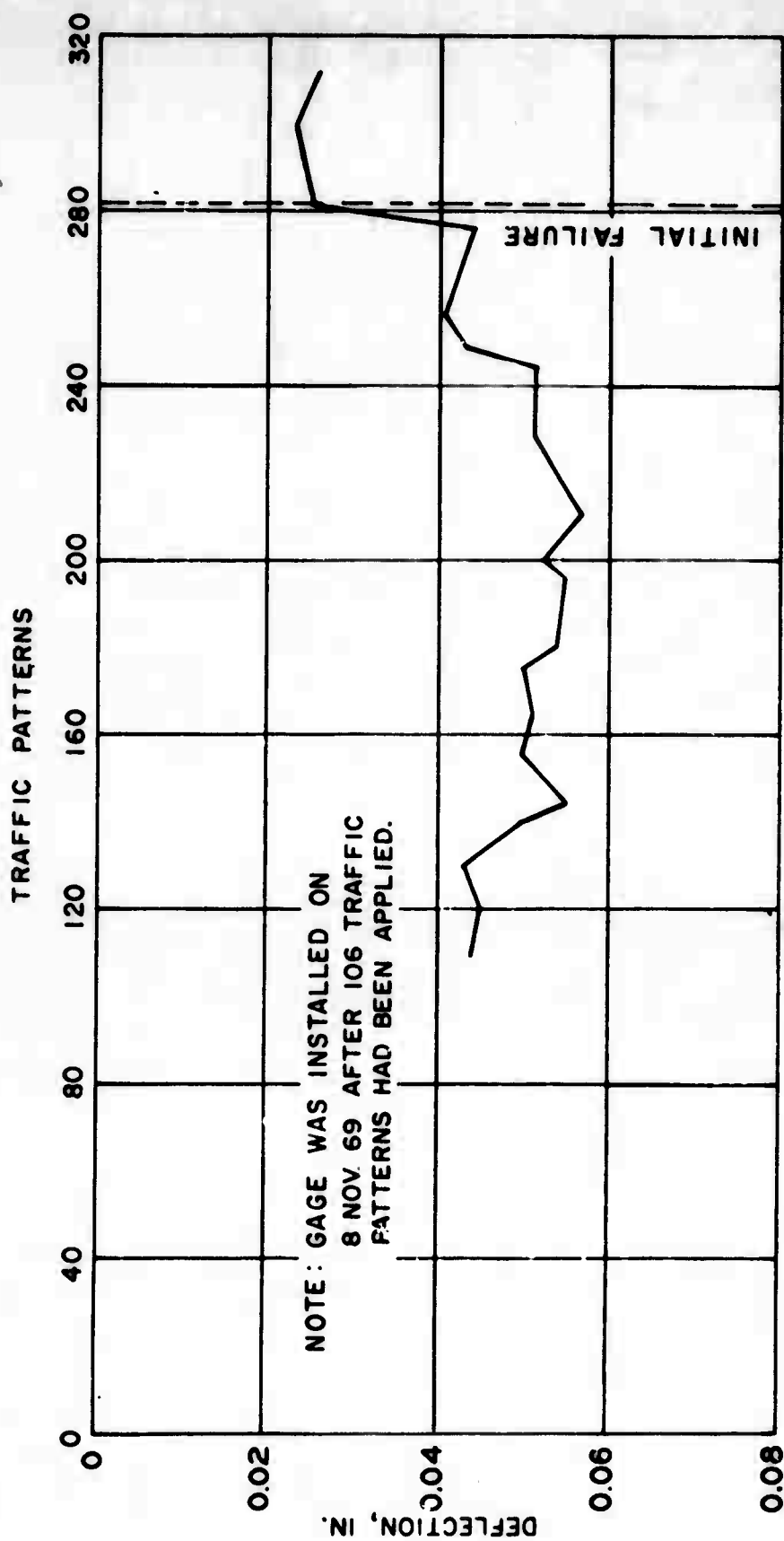


Figure 91. Deflection Versus 12-Wheel Traffic Level, Gage 2DC, Offset No. 1, SW Slab, Item 2, Rigid Pavement Test Section

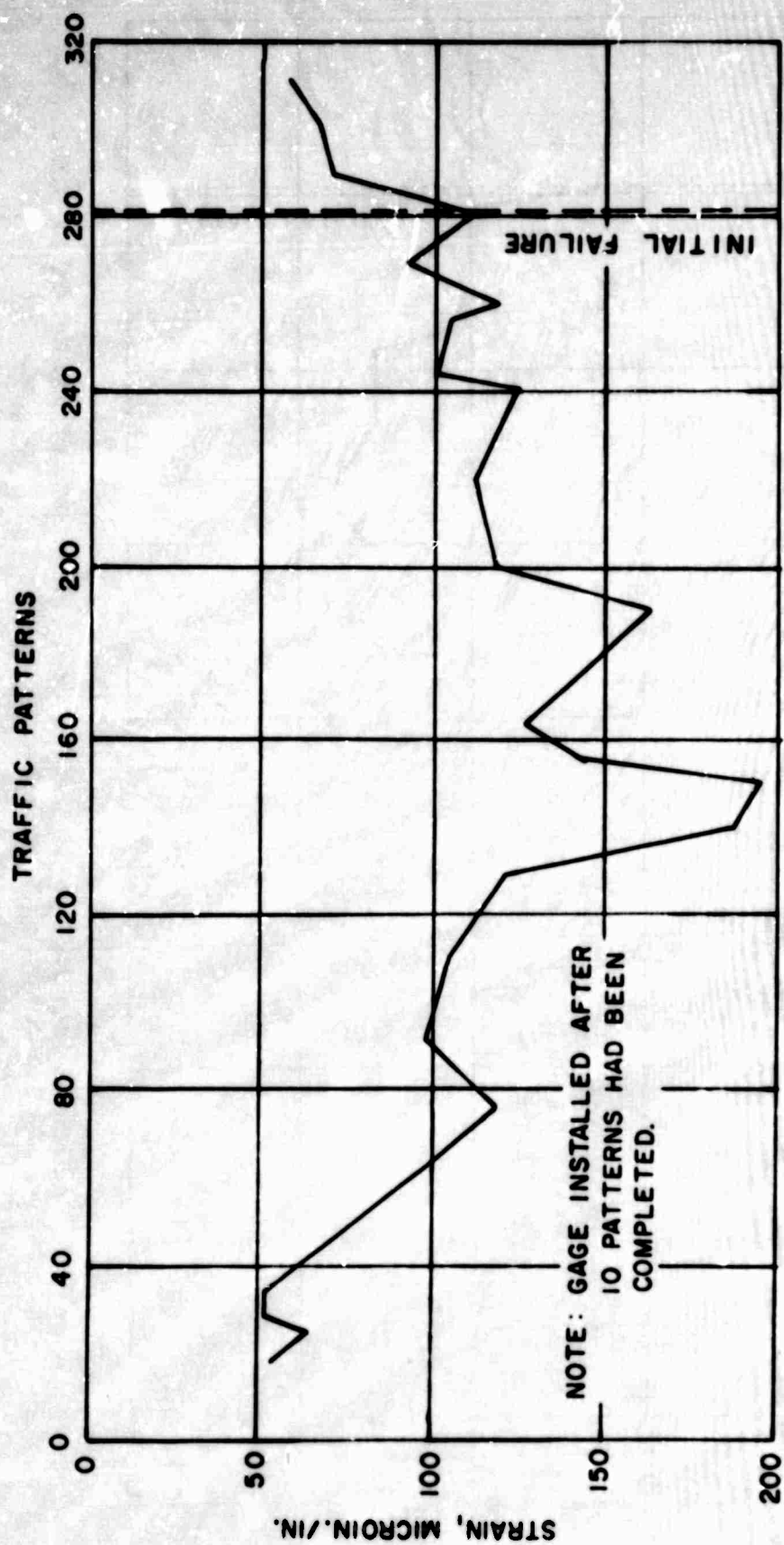


Figure 92. Strain Versus 12-Wheel Traffic Level, Gage 2SSJL, Offset No. 3, SW Slab, Item 2, Rigid Pavement Test Section

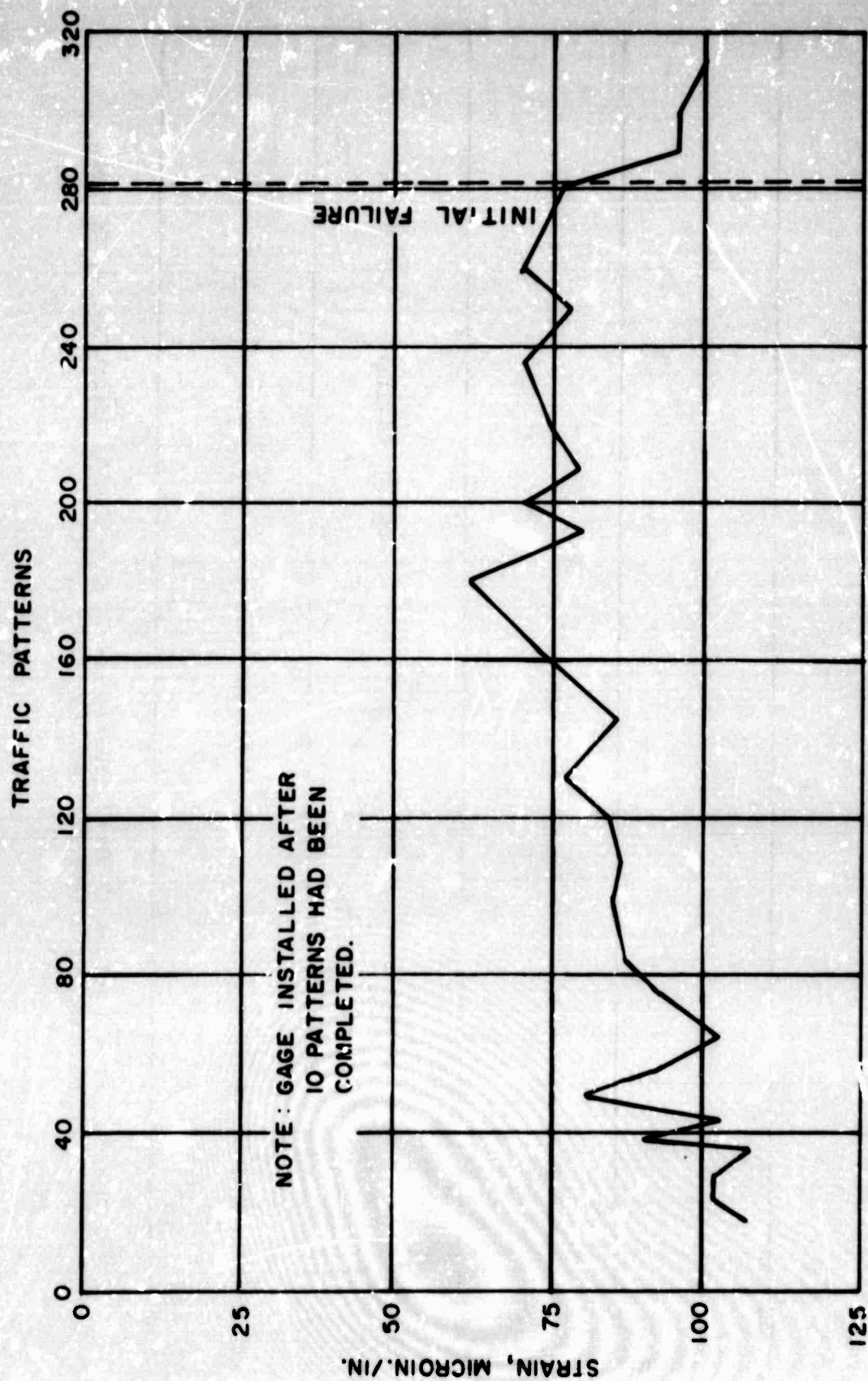


Figure 93. Strain Versus 12-Wheel Traffic Level, Gage 2SSWJT, Offset No. 3, SW Slab, Item 2, Rigid Pavement Test Section

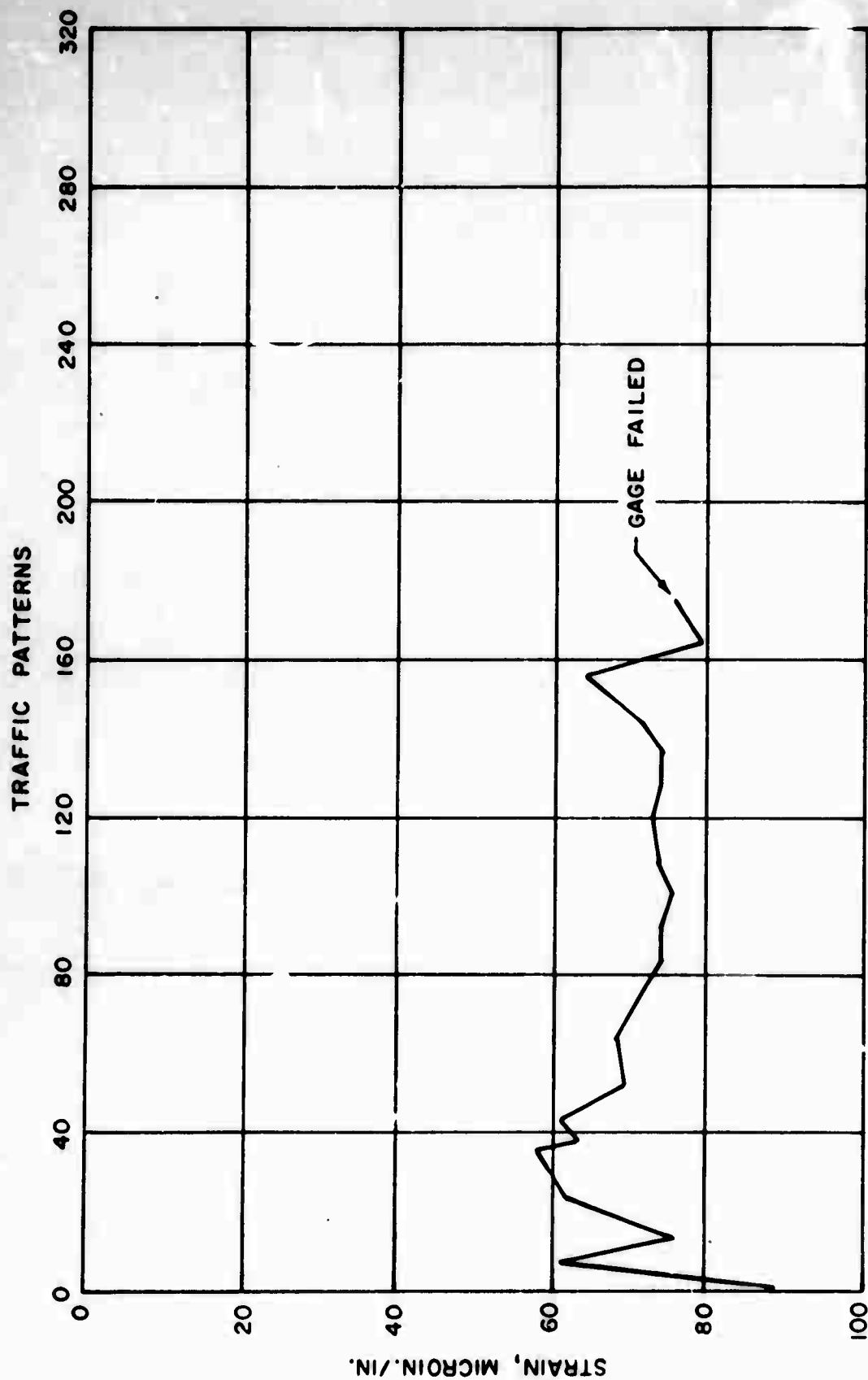


Figure 94. Strain Versus 12-Wheel Traffic Level, Gage 2SNJL, Offset No. 4, NW Slab, Item 2, Rigid Pavement Test Section

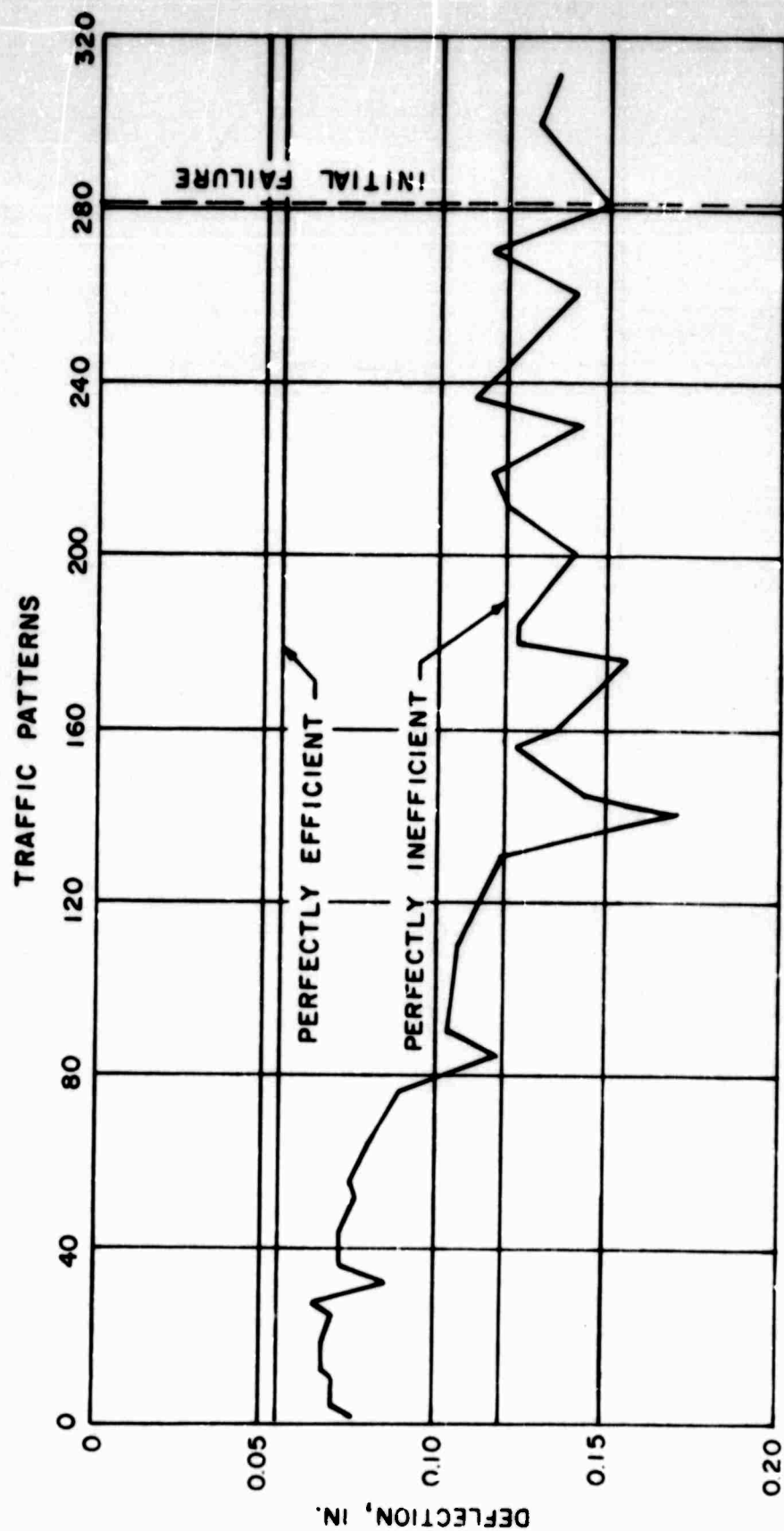


Figure 95. Deflection Versus 12-Wheel Traffic Level, Gage 2DSJL, Offset No. 5, SW Slab, Item 2, Rigid Pavement Test Section

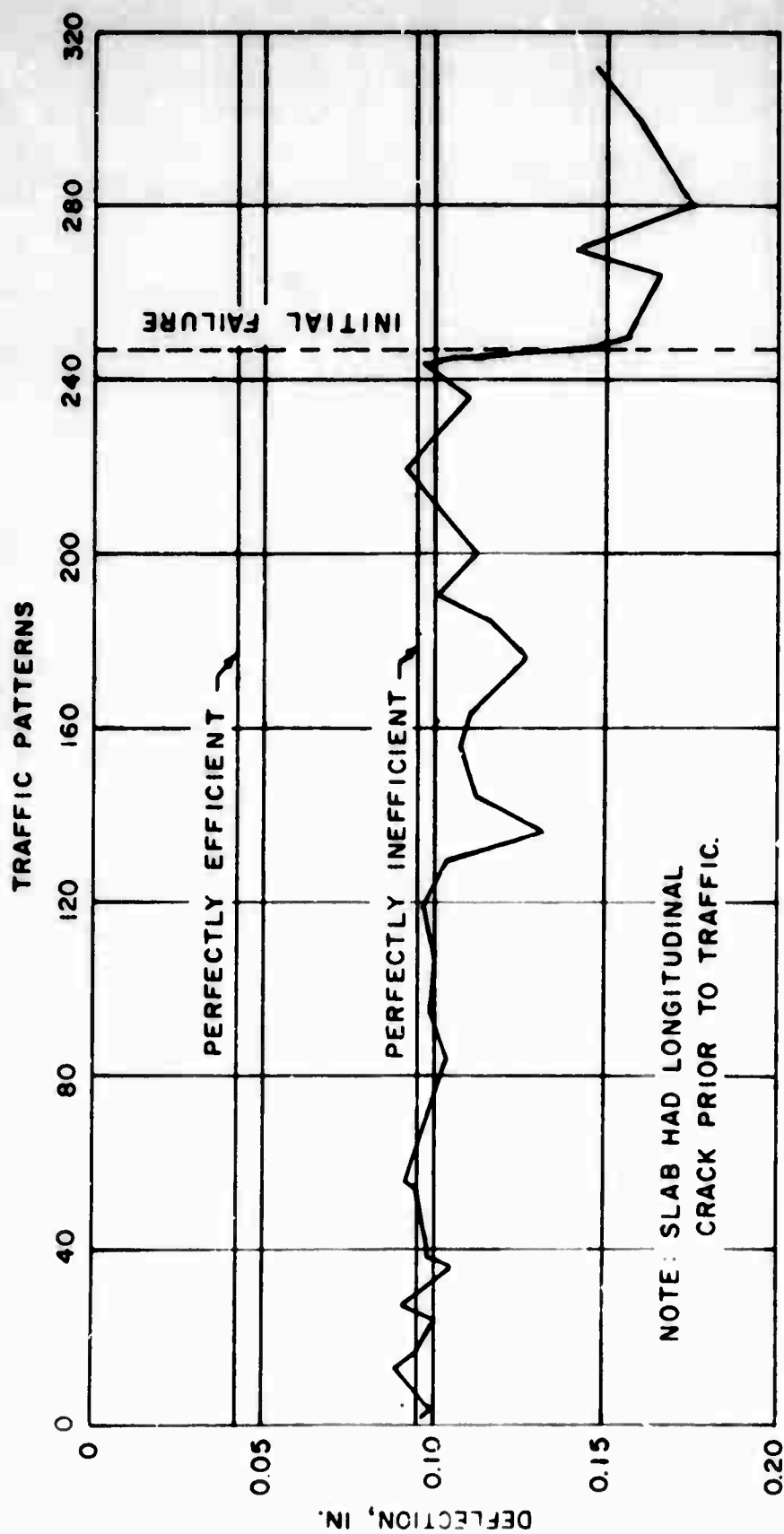


Figure 96. Deflection Versus 12-Wheel Traffic Level, Gage 29FD, Offset No. 5, SE Slab, Item 2, Rigid Pavement Test Section

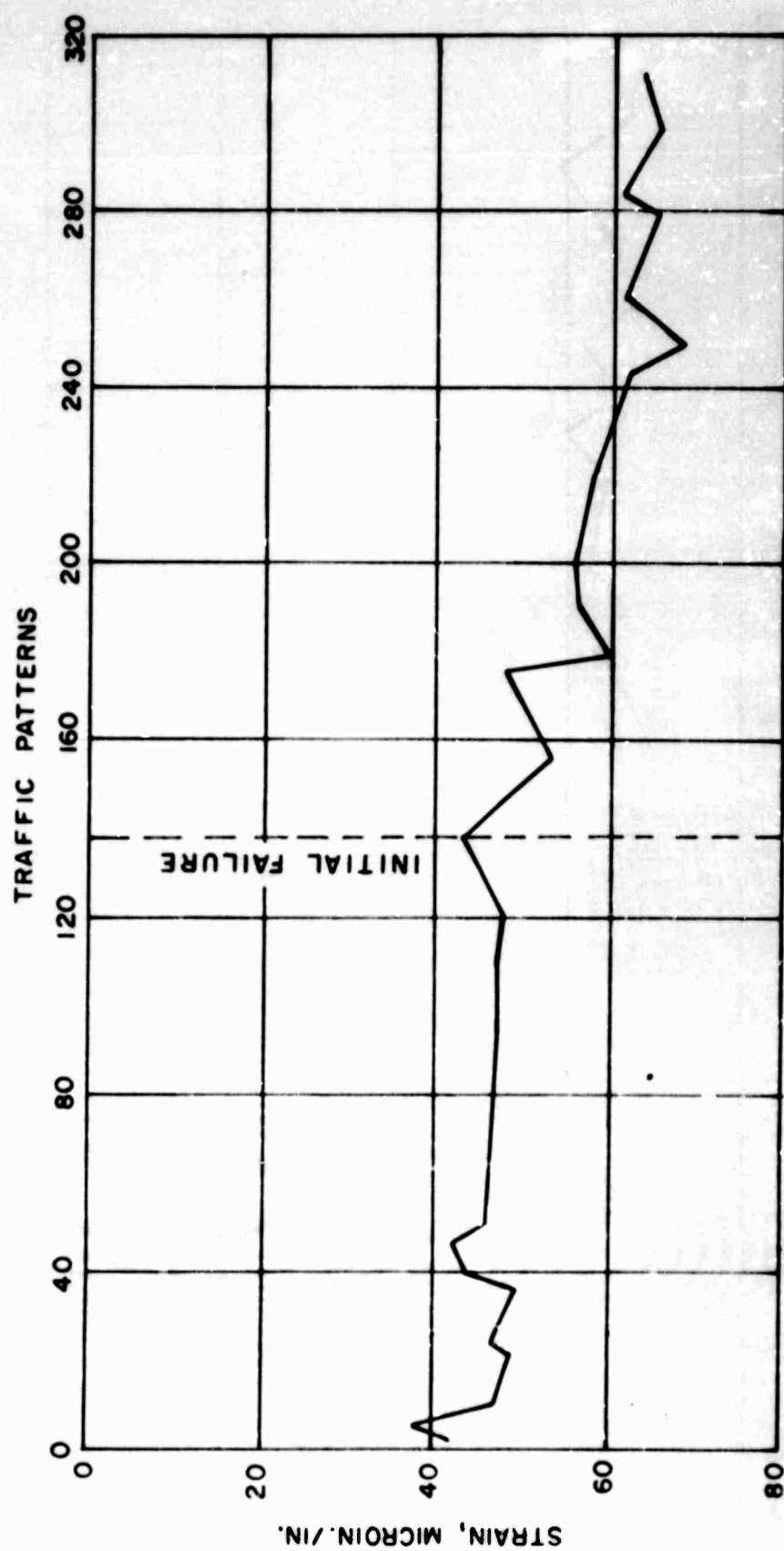


Figure 97. Strain Versus 12-Wheel Traffic Level, Gage 3SCT, Offset No. 1, SW Slab, Item 3, Rigid Pavement Test Section

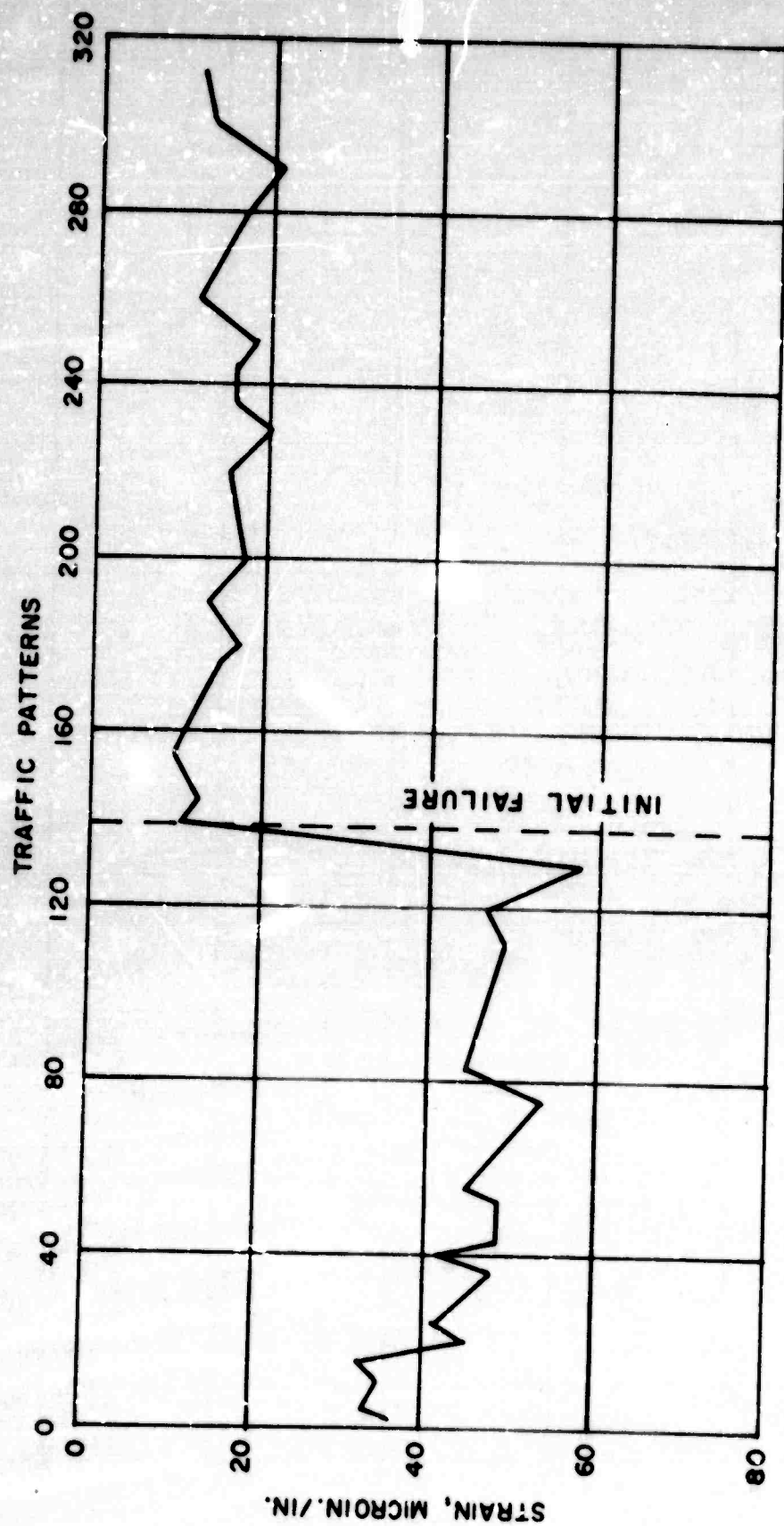


Figure 98. Strain Versus 12-Wheel Traffic Level, Gage 3SCL, Offset No. 1, SW Slab, Item 3, Rigid Pavement Test Section

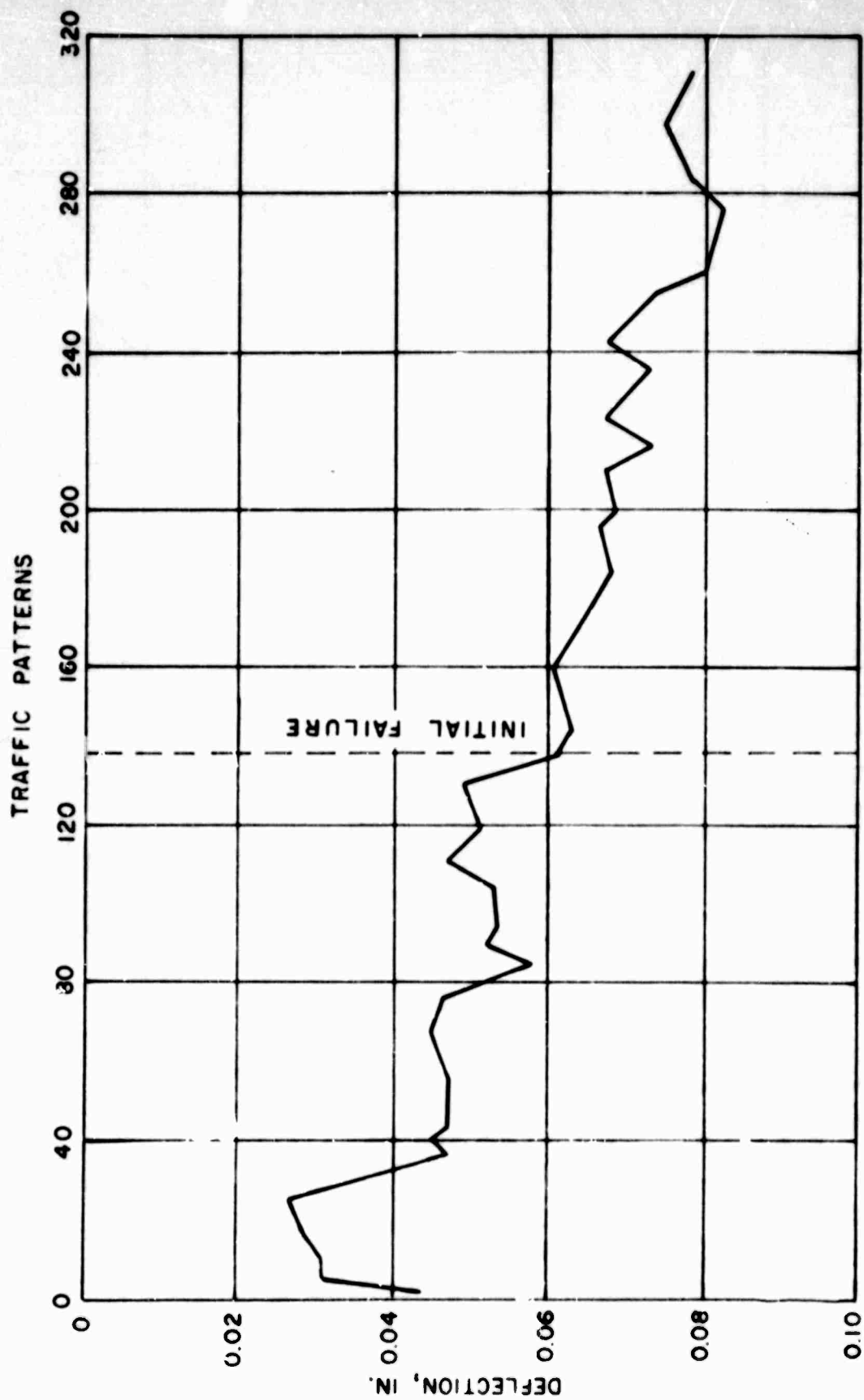


Figure 99. Deflection Versus 12-Wheel Traffic Level, Gage 3DC, Offset No. 1, SW Slab, Item 3, Rigid Pavement Test Section

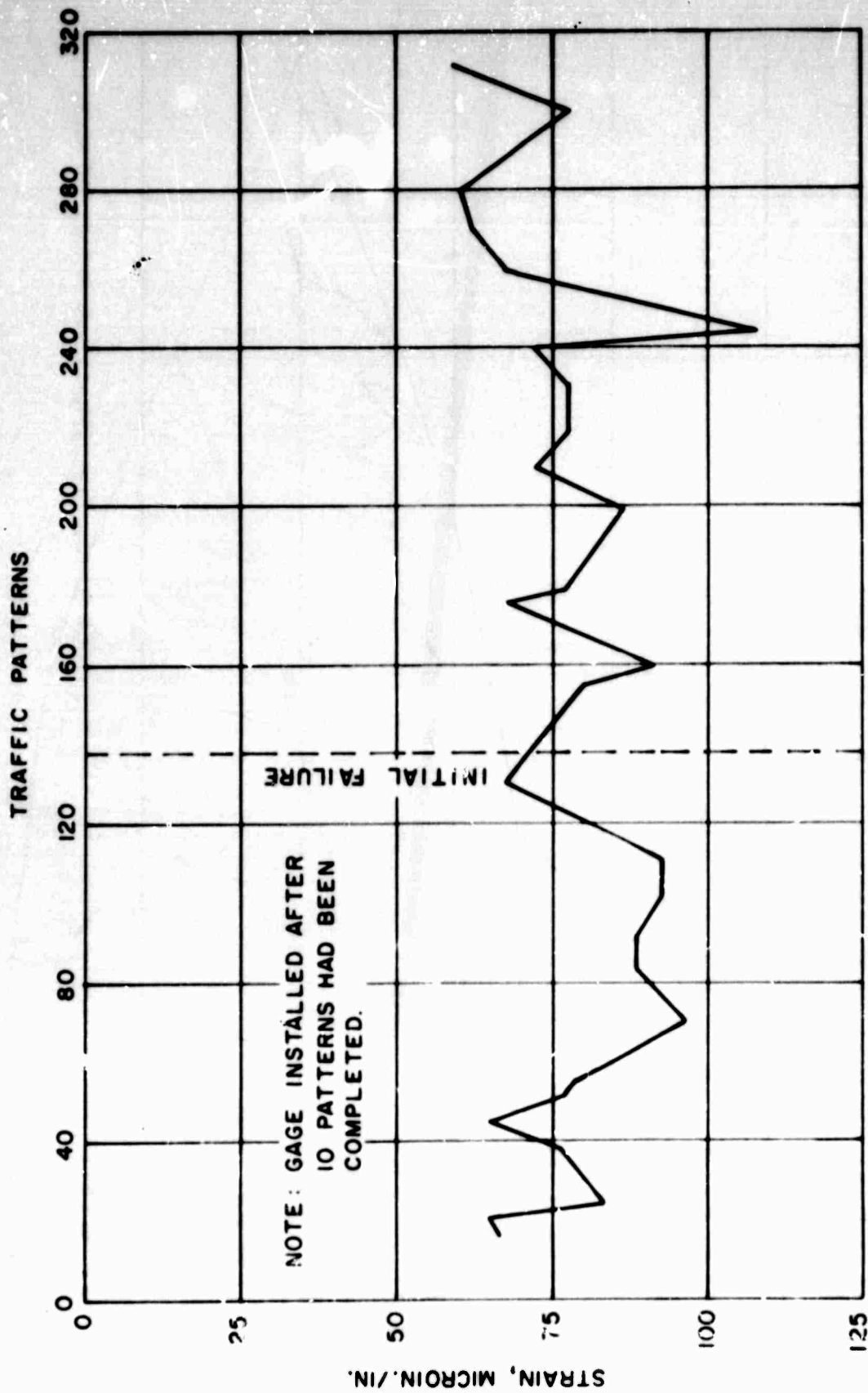


Figure 100. Strain Versus 12-Wheel Traffic Level, Gage 3SSWJT, Offset No. 3, SW Slab, Item 3, Rigid Pavement Test Section

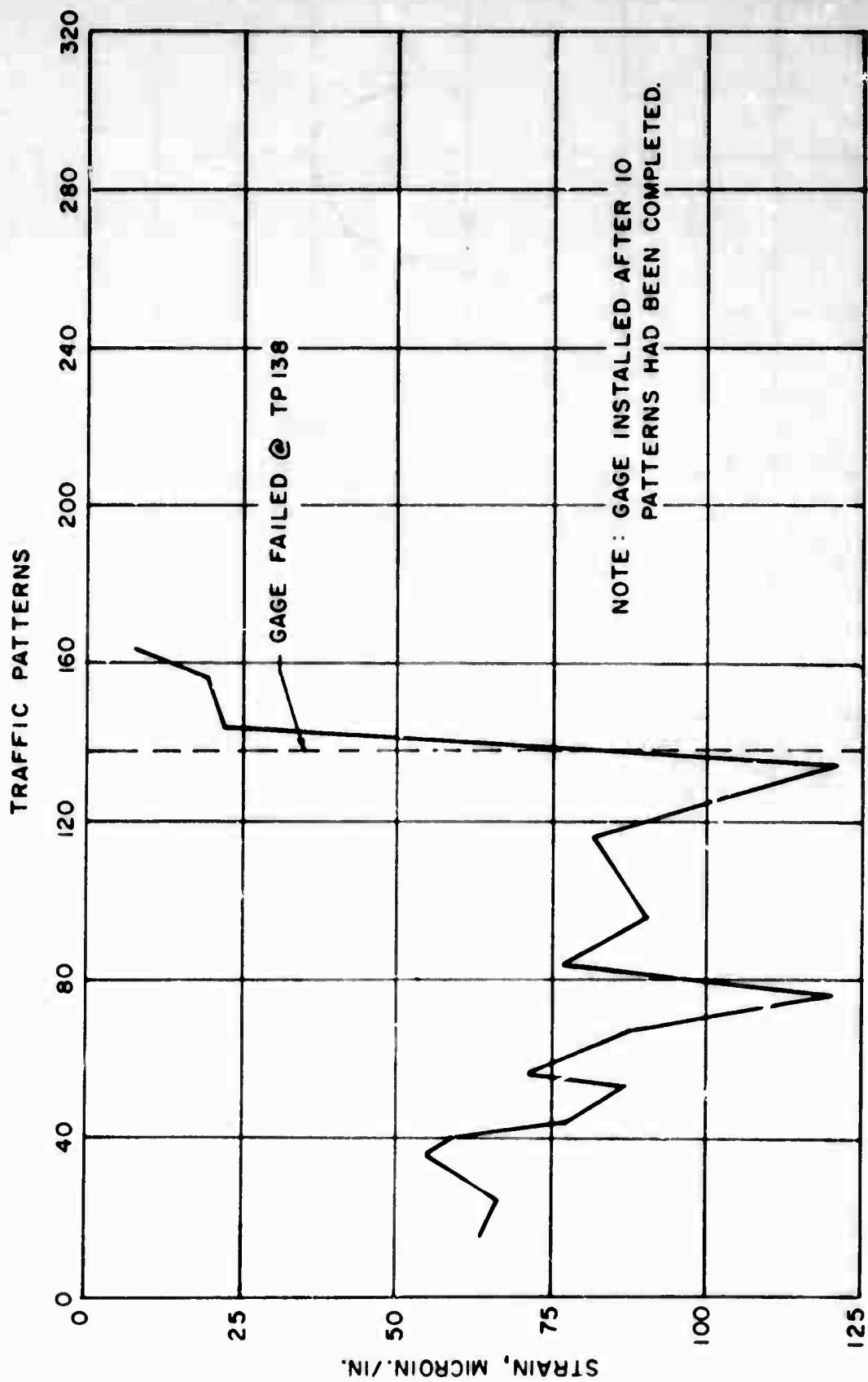


Figure. 101. Strain Versus 12-Wheel Traffic Level, Gage 3SSJL, Offset No. 3, SE Slab, Item 3, Rigid Pavement Test Section

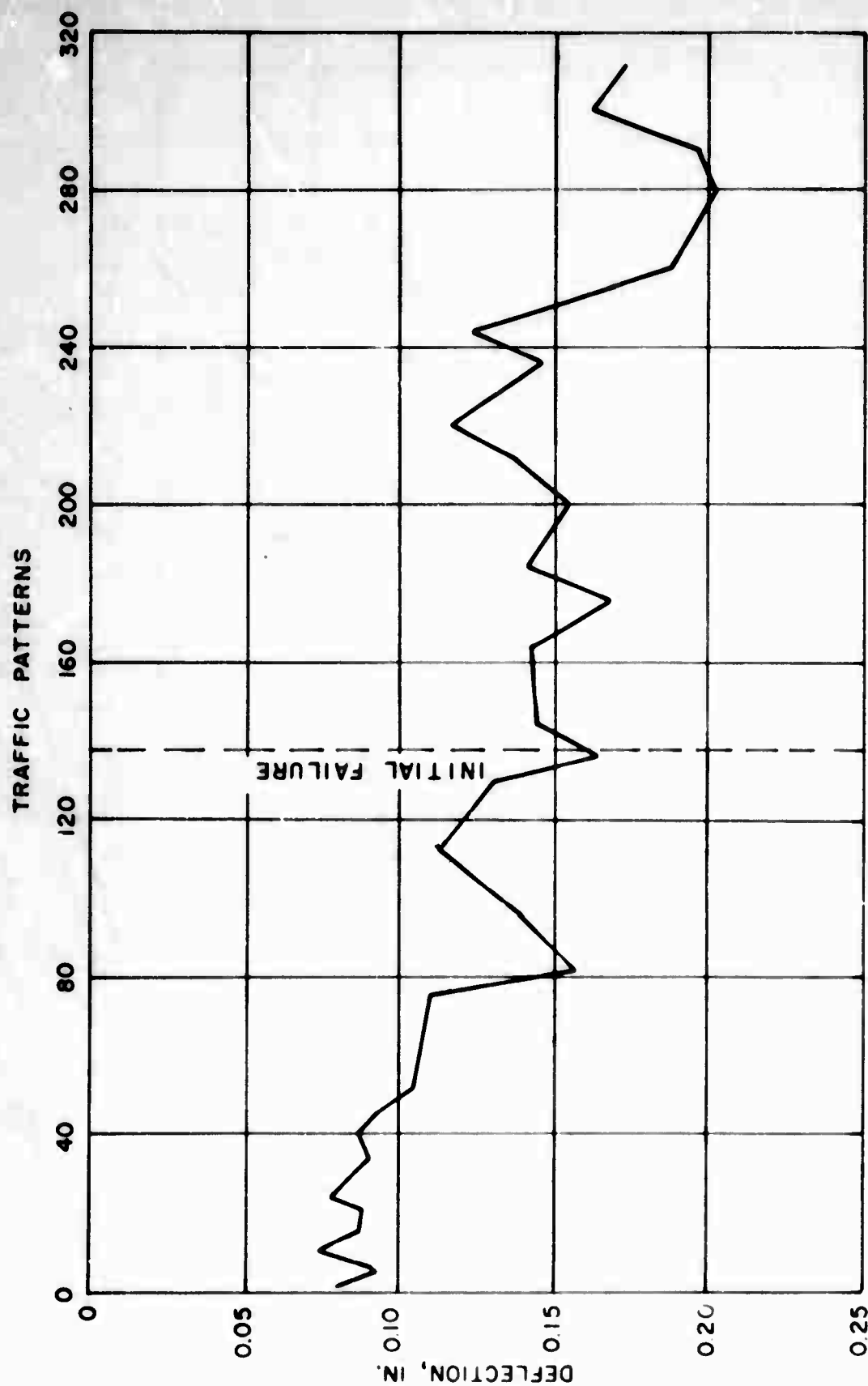


Figure 102. Deflection Versus 12-Wheel Traffic Level, Gage 3DEJT, Offset No. 5, "F" Slab, Item 3, Rigid Pavement Test Section

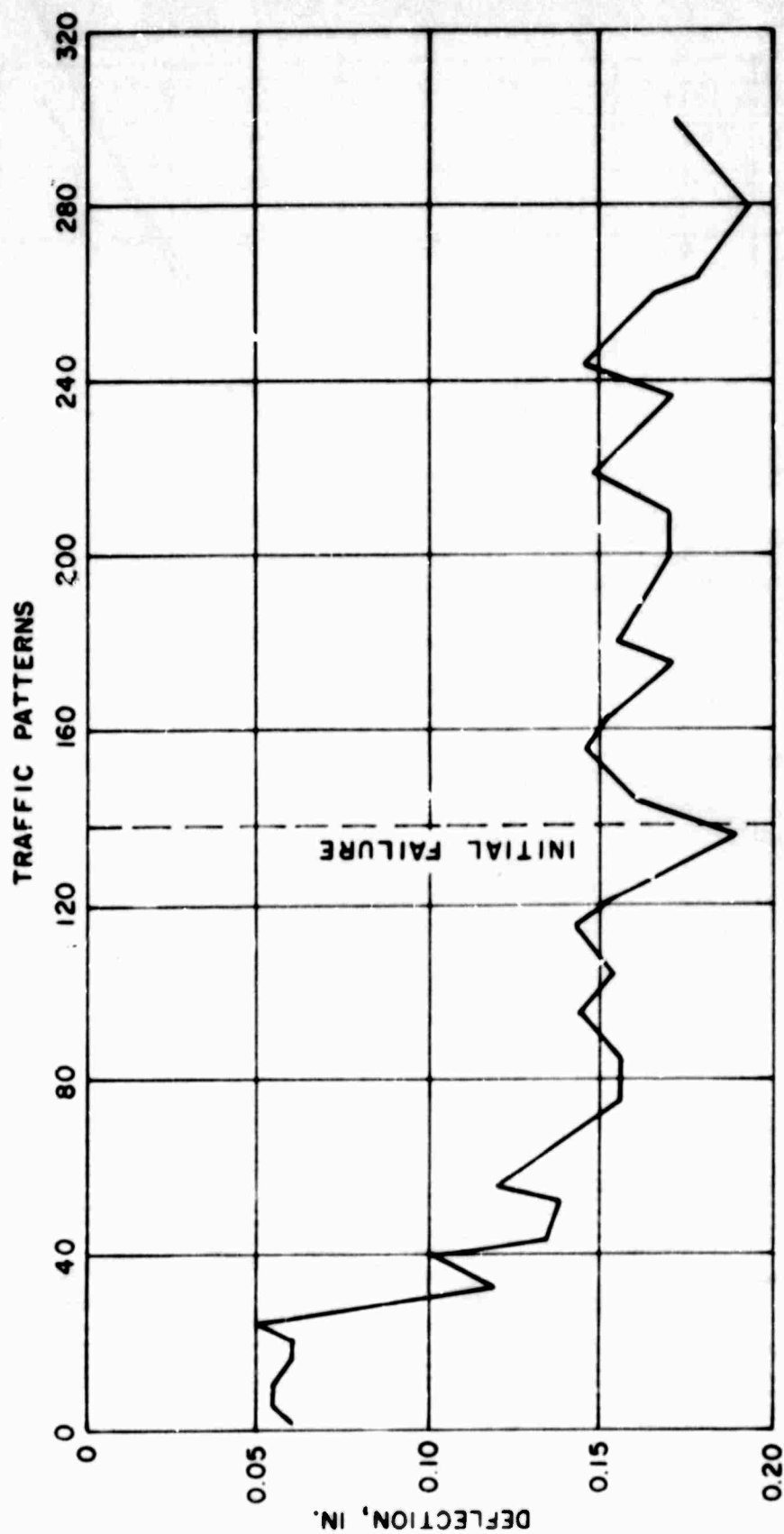


Figure 103. Deflection Versus 12-Wheel Traffic Level, Gage 3DWJT, Offset No. 5, SW Slab, Item 3, Rigid Pavement Test Section

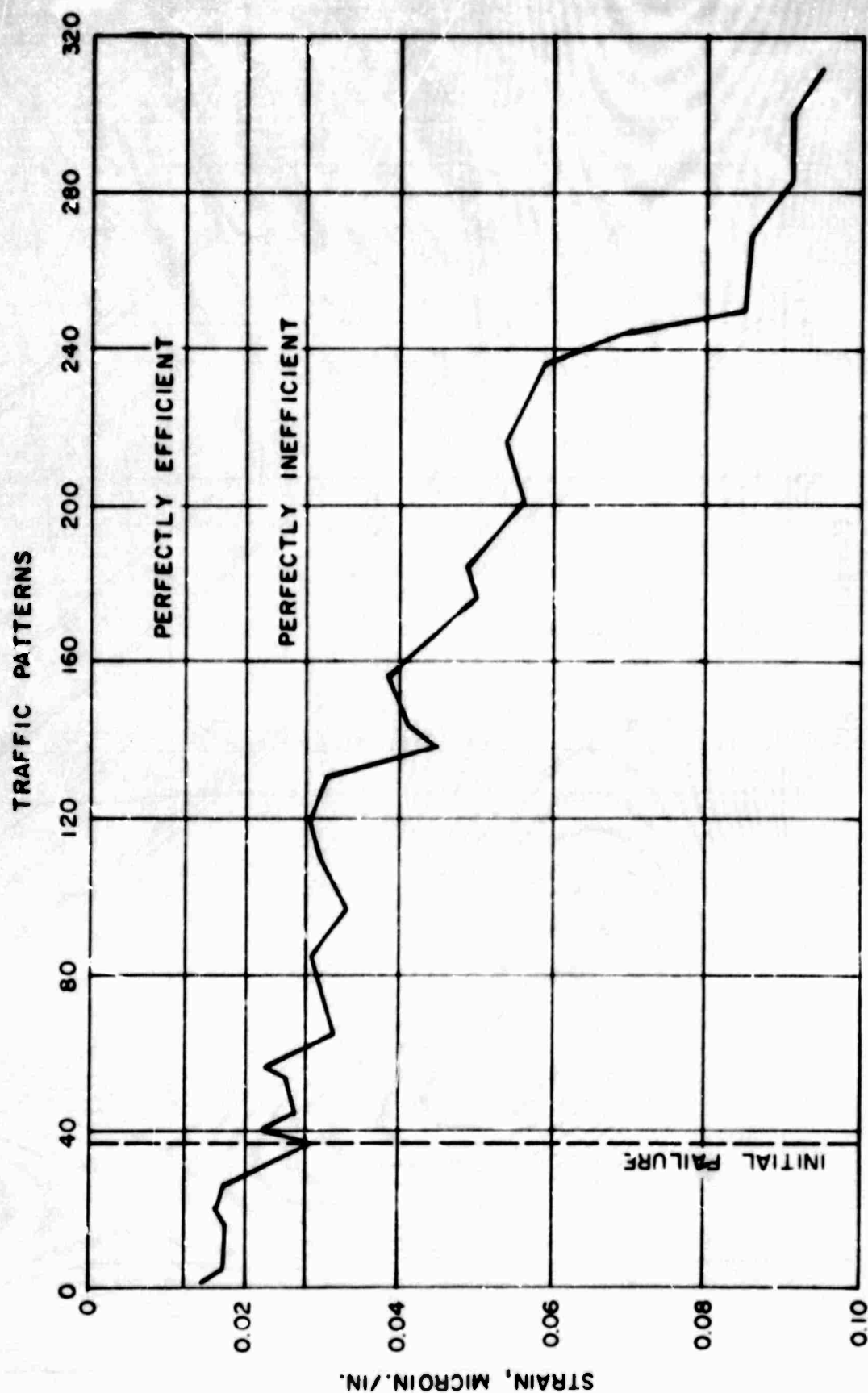


Figure 104. Deflection Versus 12-Wheel Traffic Level, Gage 33PD, Offset No. 5, SE Slab, Item 3, Rigid Pavement Test Section

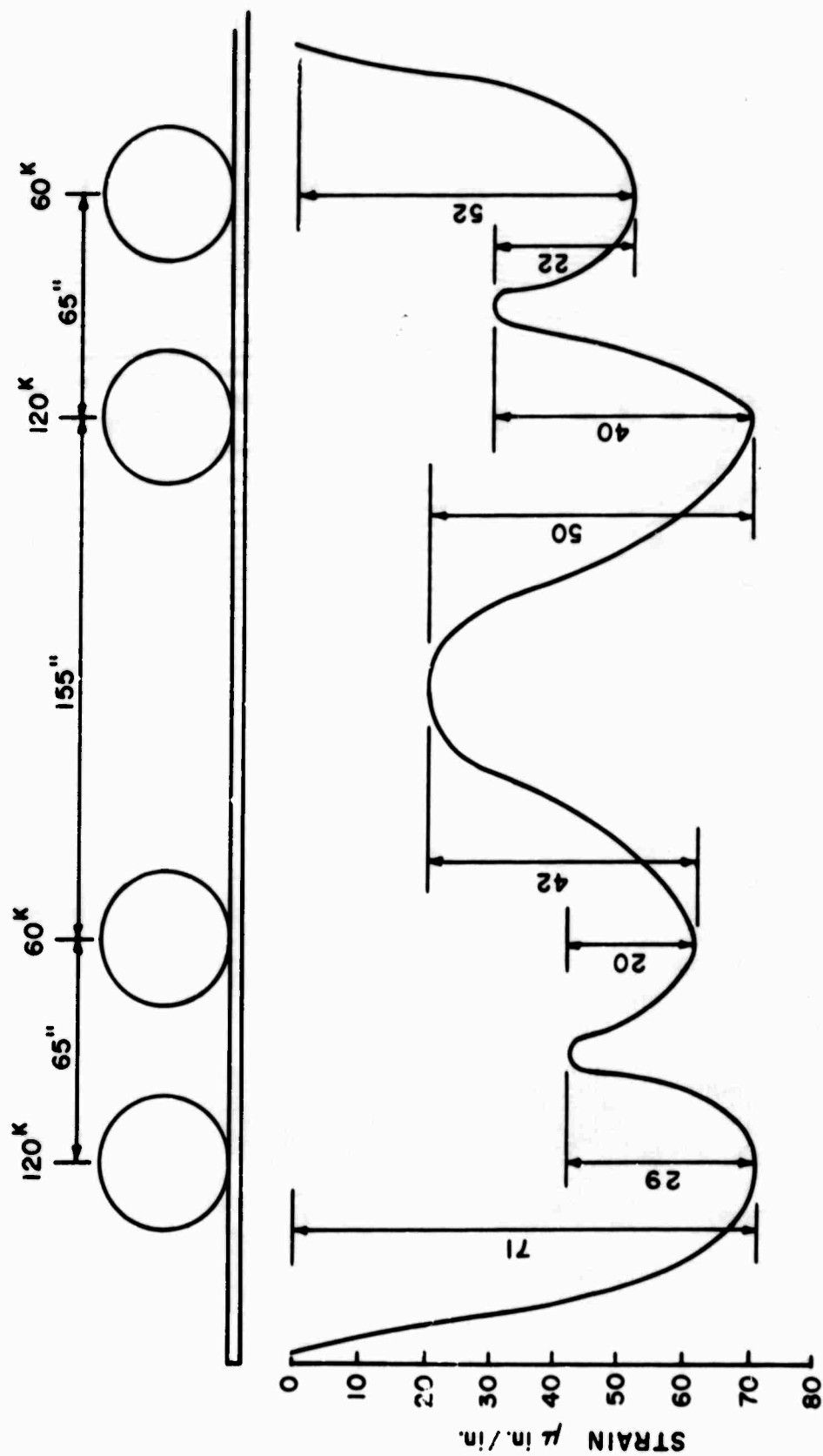


Figure 105. Typical Strain Trace Under 12-Wheel Traffic Showing Strain Profile for One Pass.
 Note: Gage 2SCL, Test Item 2; Surface Strain Gage; Longitudinal Direction; Gear on Traffic Line 2; Thickness = 12.1 in.; $k = 78$ pci; Concrete Flexural Strength = 800 psi. Outside Wheel of Gear is Passing Gage at a Distance of 16 ft

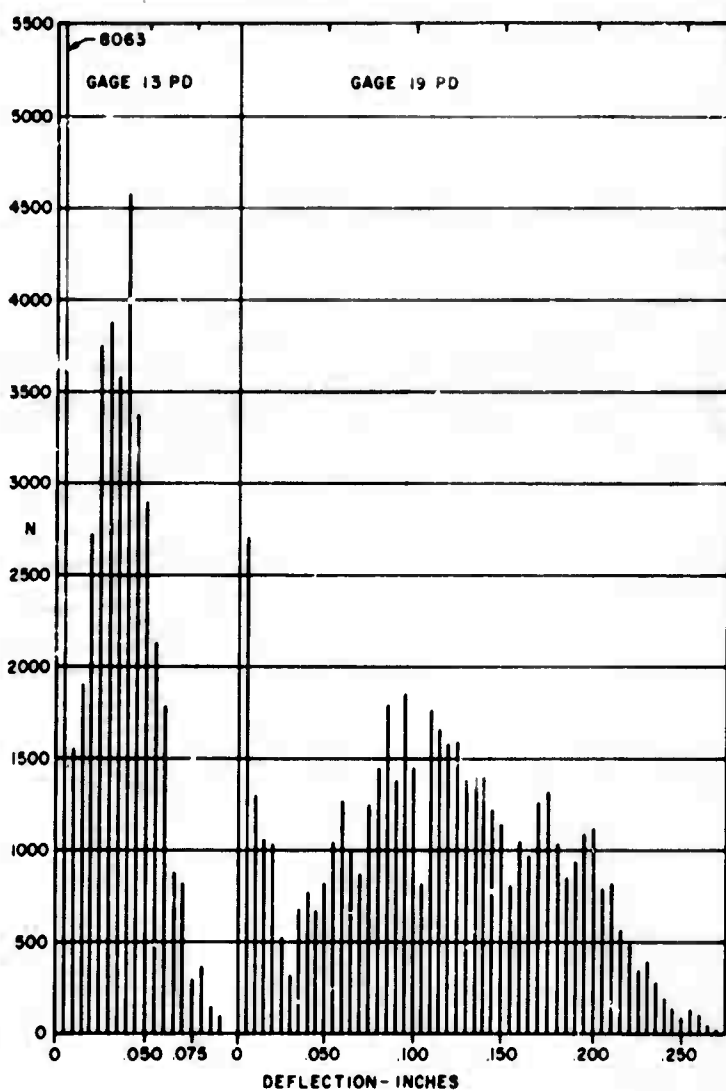


Figure 106. Histograms for Deflection Excursions Under 12-Wheel Traffic, Item 1, Rigid Pavement Test Section

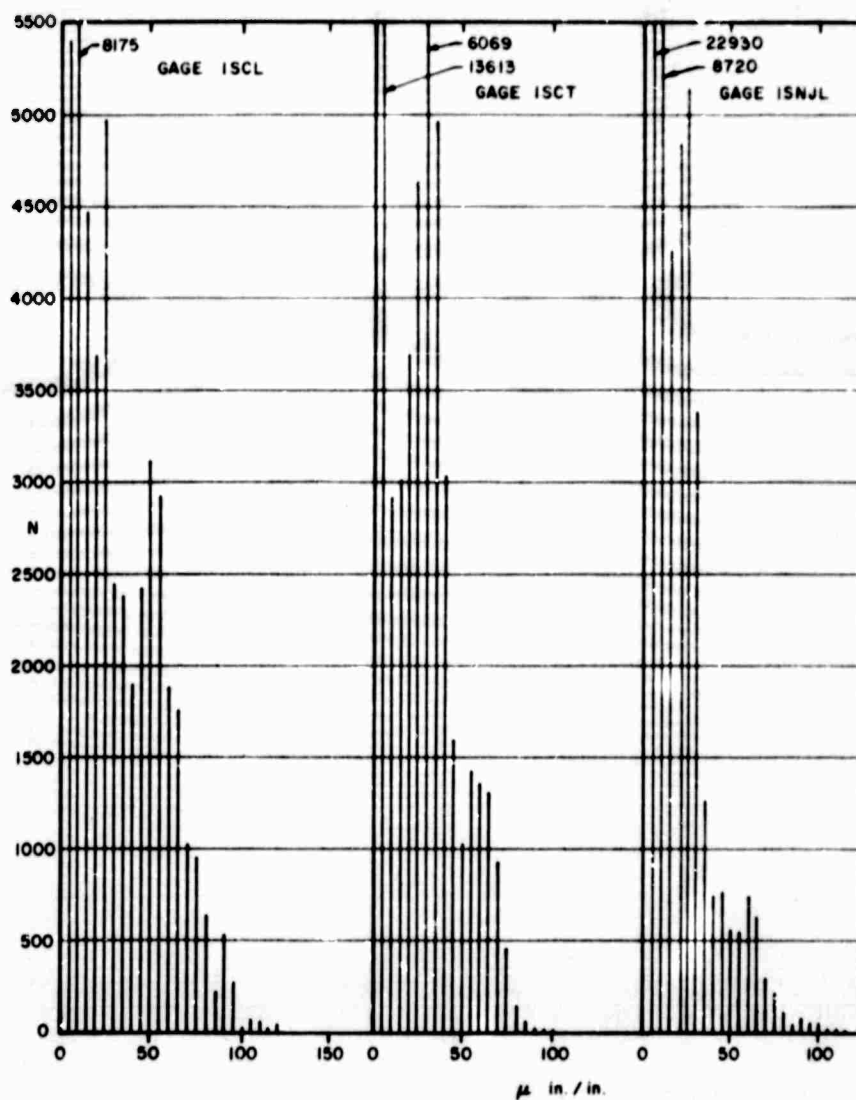


Figure 107. Histograms for Strain Excursions Under 12-Wheel Traffic, Item 1, Rigid Pavement Test Section

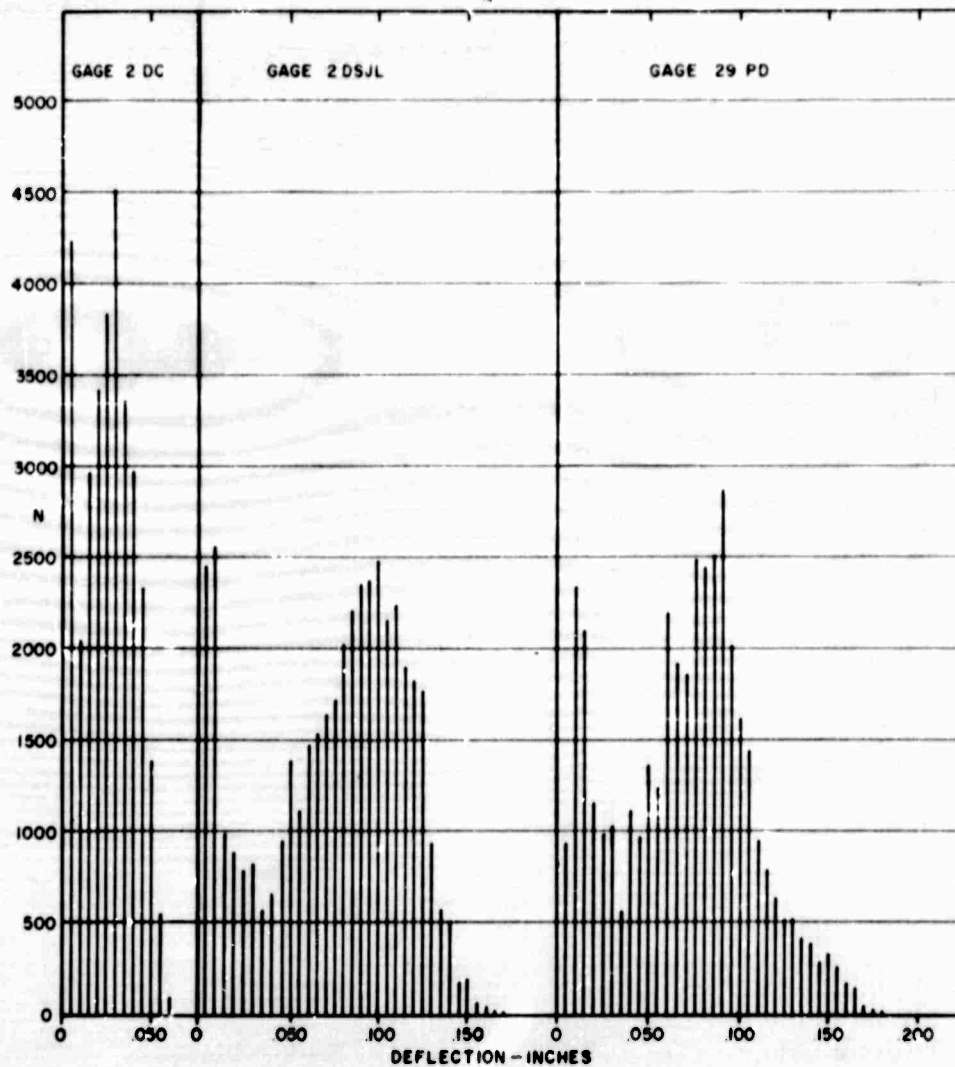


Figure 108. Histograms for Deflection Excursions Under 12-Wheel Traffic, Item 2, Rigid Pavement Test Section

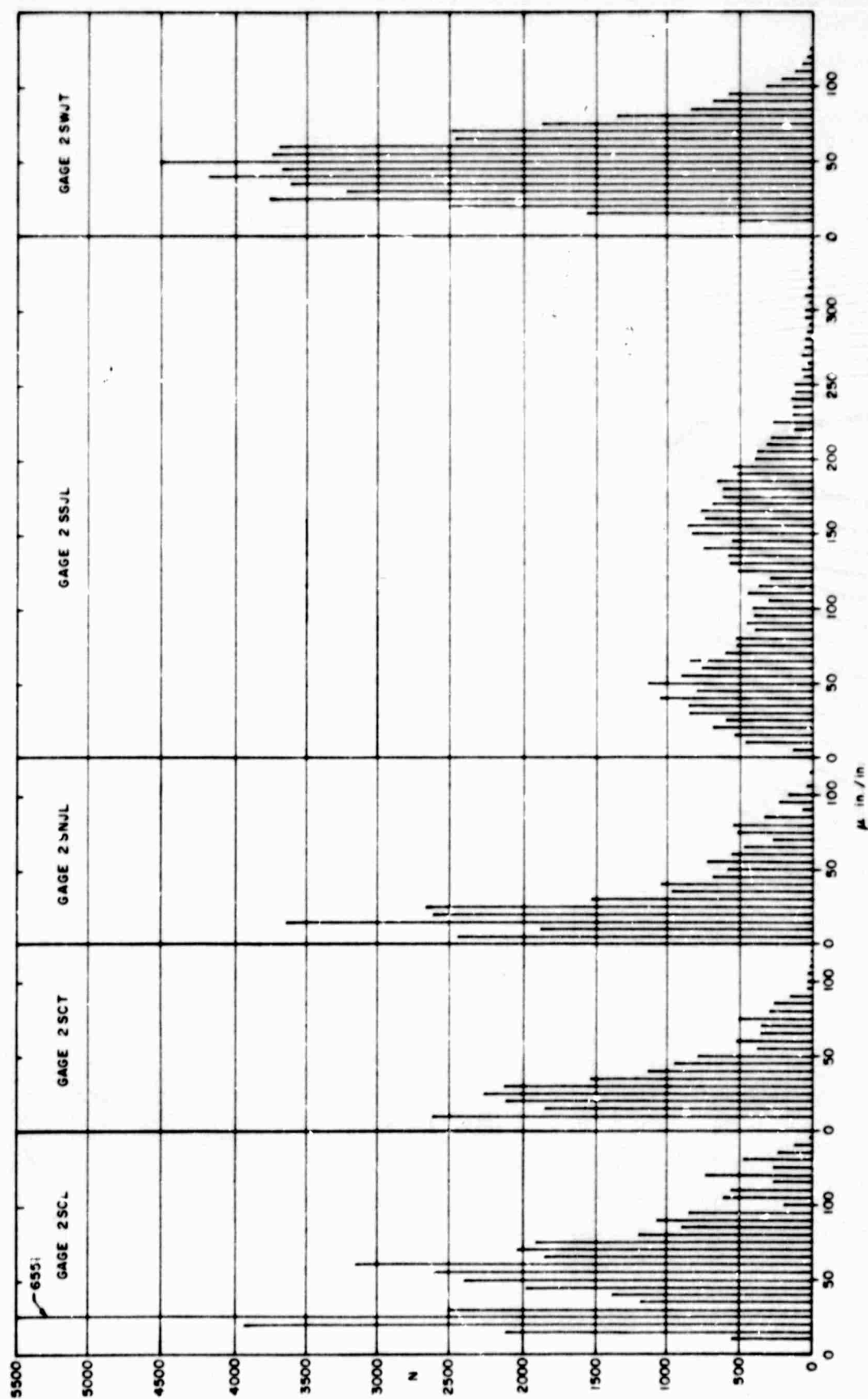


Figure 109. Histograms for Strain Excursions Under 12-Wheel Traffic, Item 2, Rigid Pavement Test Section

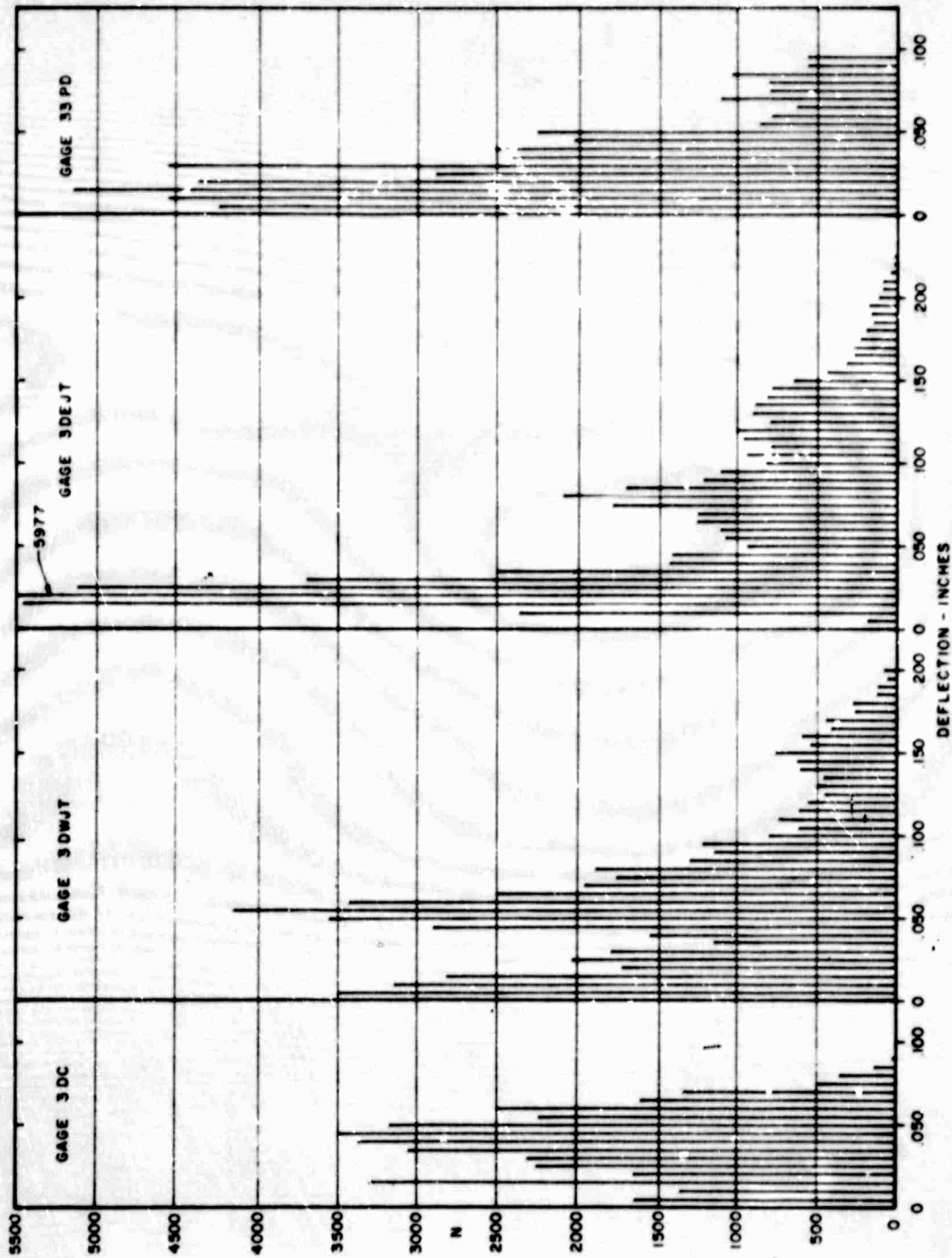


Figure 110. Histograms for Deflection Excursions Under 12-Wheel Traffic, Item 3, Rigid Pavement Test Section

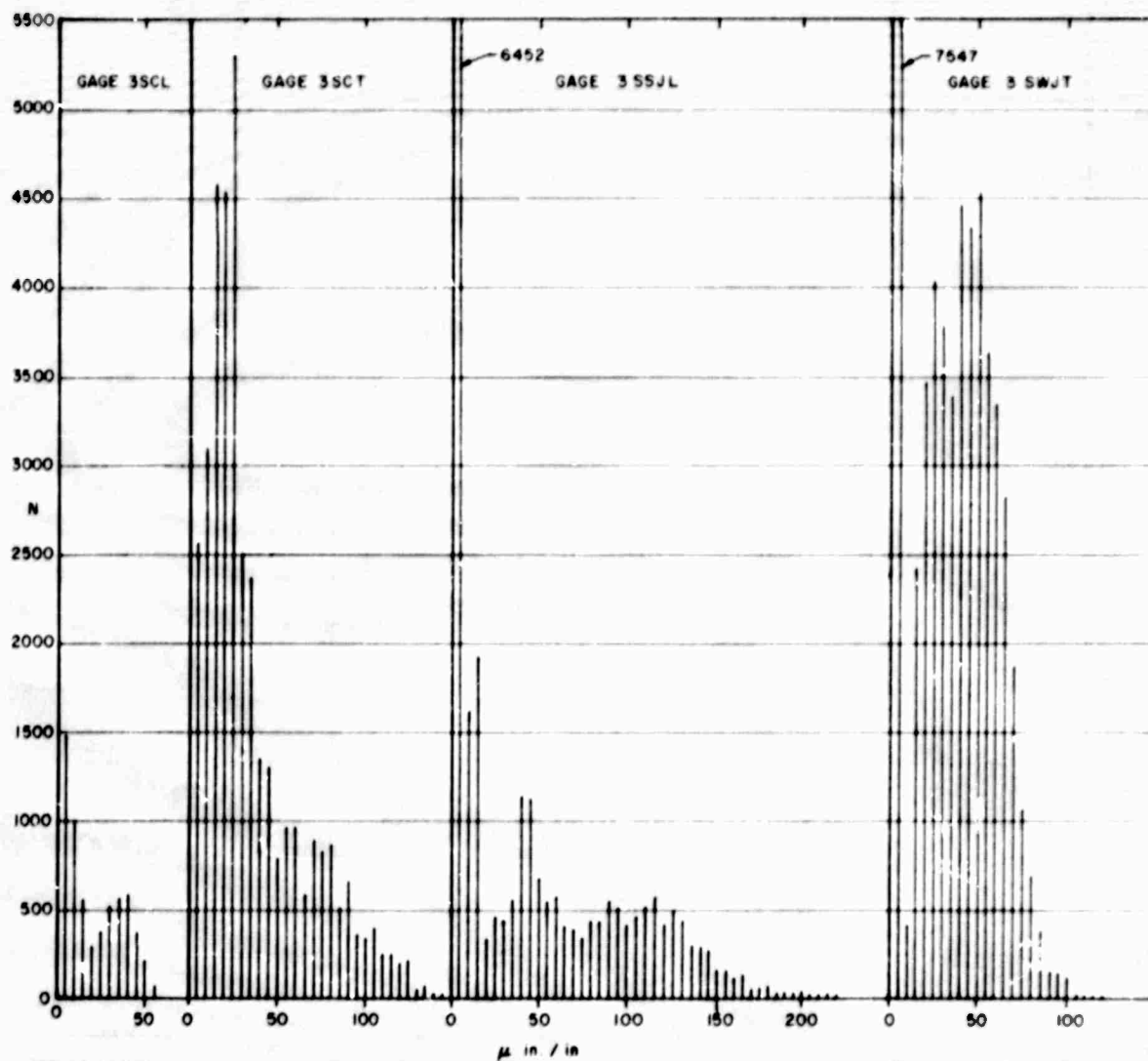


Figure 111. Histograms for Strain Excursions Under 12-Wheel Traffic, Item 3, Rigid Pavement Test Section

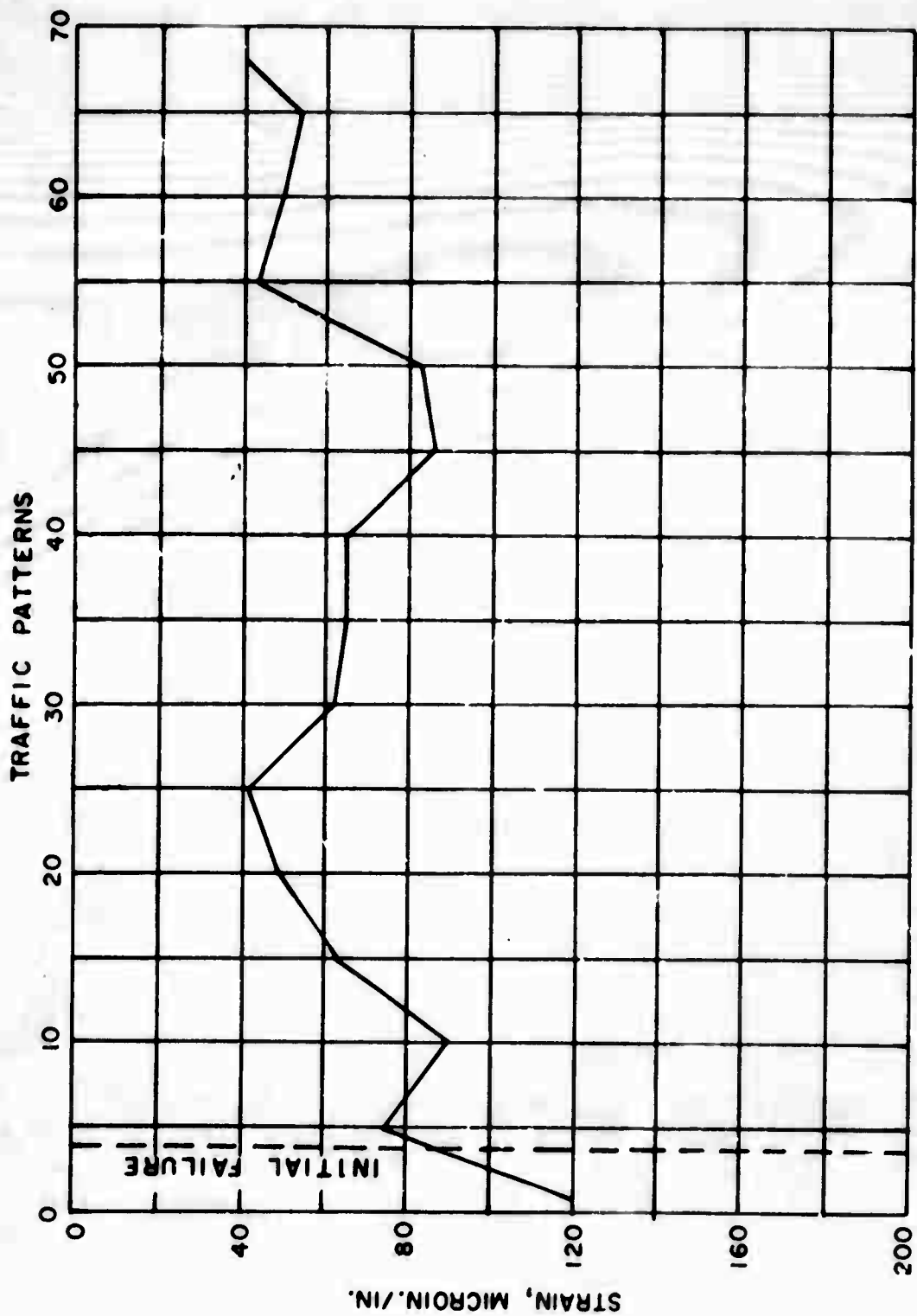


Figure 112. Strain Versus Twin-Tandem Traffic Level, Gage 2NSCT, NE Slab, Item 2, Rigid Pavement Test Section

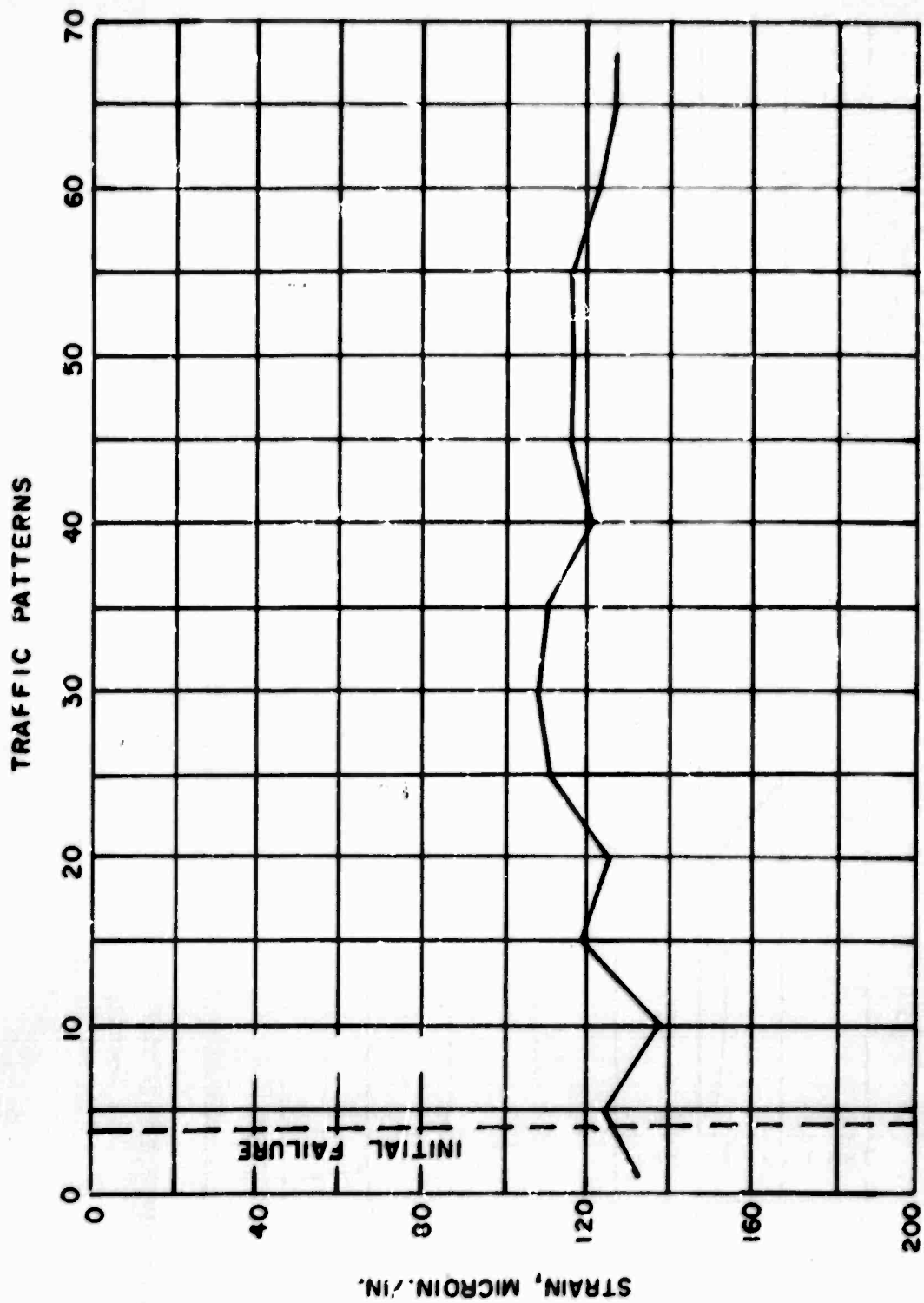


Figure 113. Strain Versus Twin-Tandem Traffic Level, Gage 2NSCL, NE Slab, Item 2, Rigid Pavement Test Section

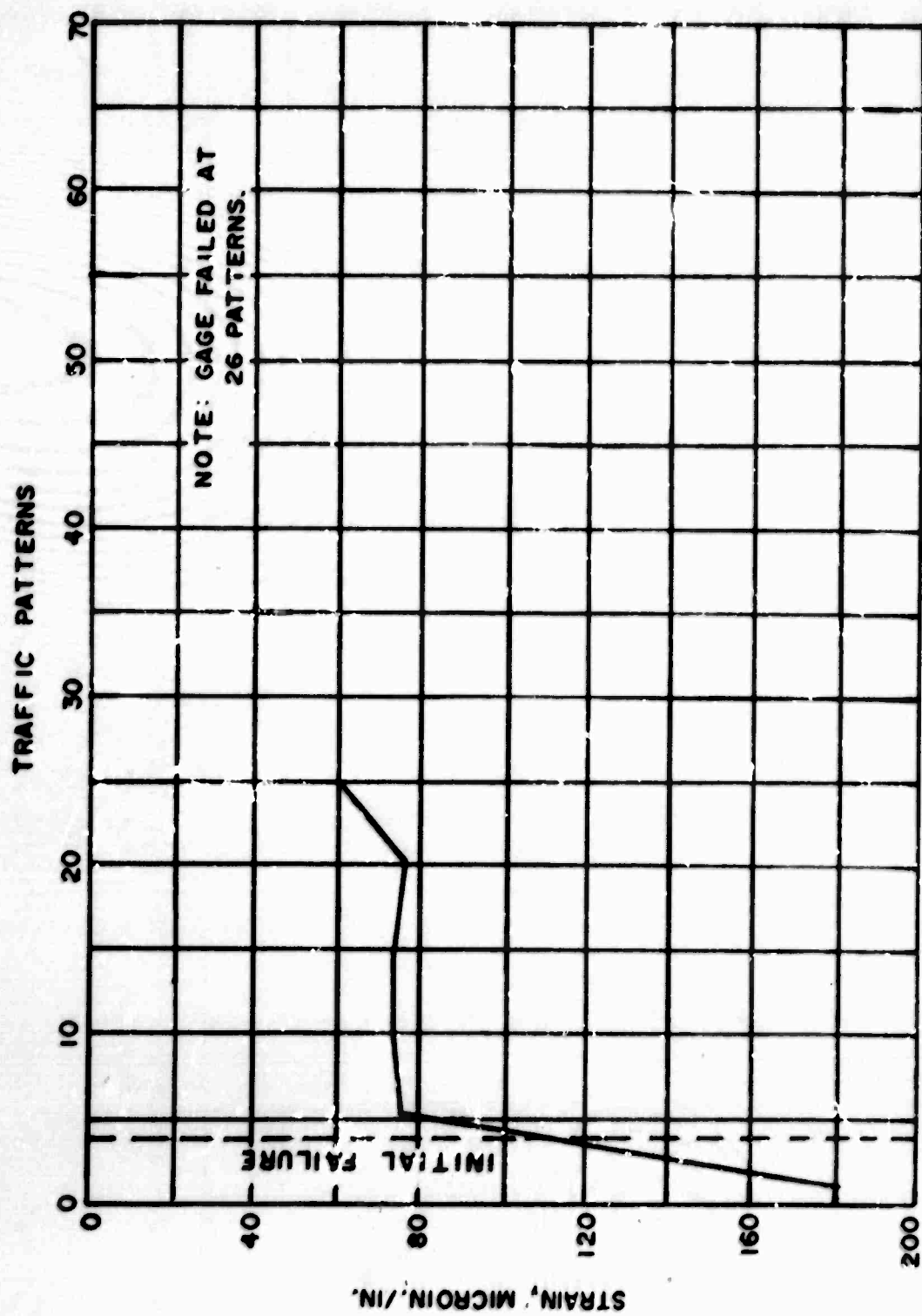


Figure 114. Strain Versus Twin-Tandem Traffic Level, Gage 2NSWJT, NW Slab, Item 2, Rigid Pavement Test Section

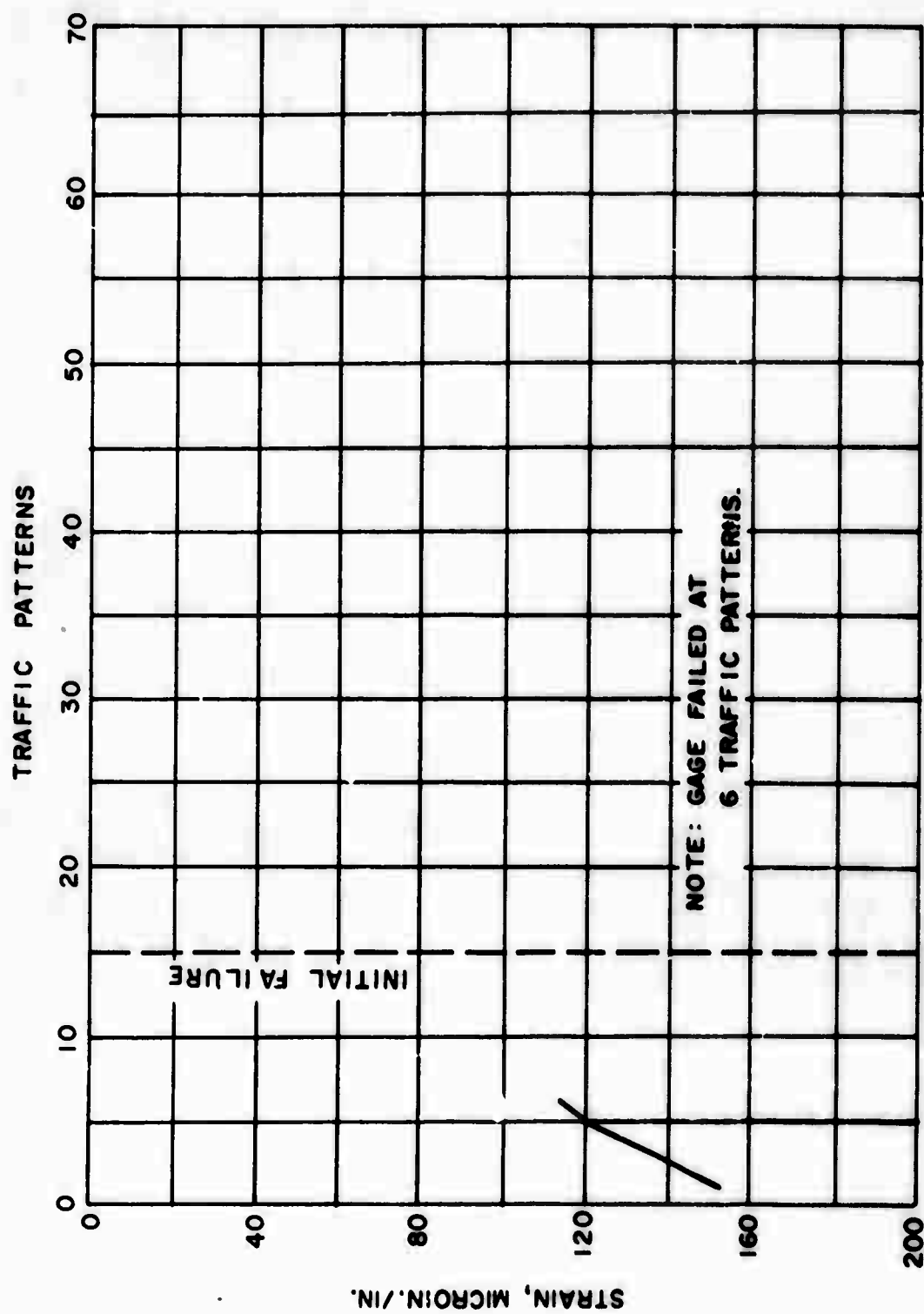


Figure 115. Strain Versus Twin-Tandem Traffic Level, Gage 3NSCT, NE Slab, Item 3, Rigid Pavement Test Section

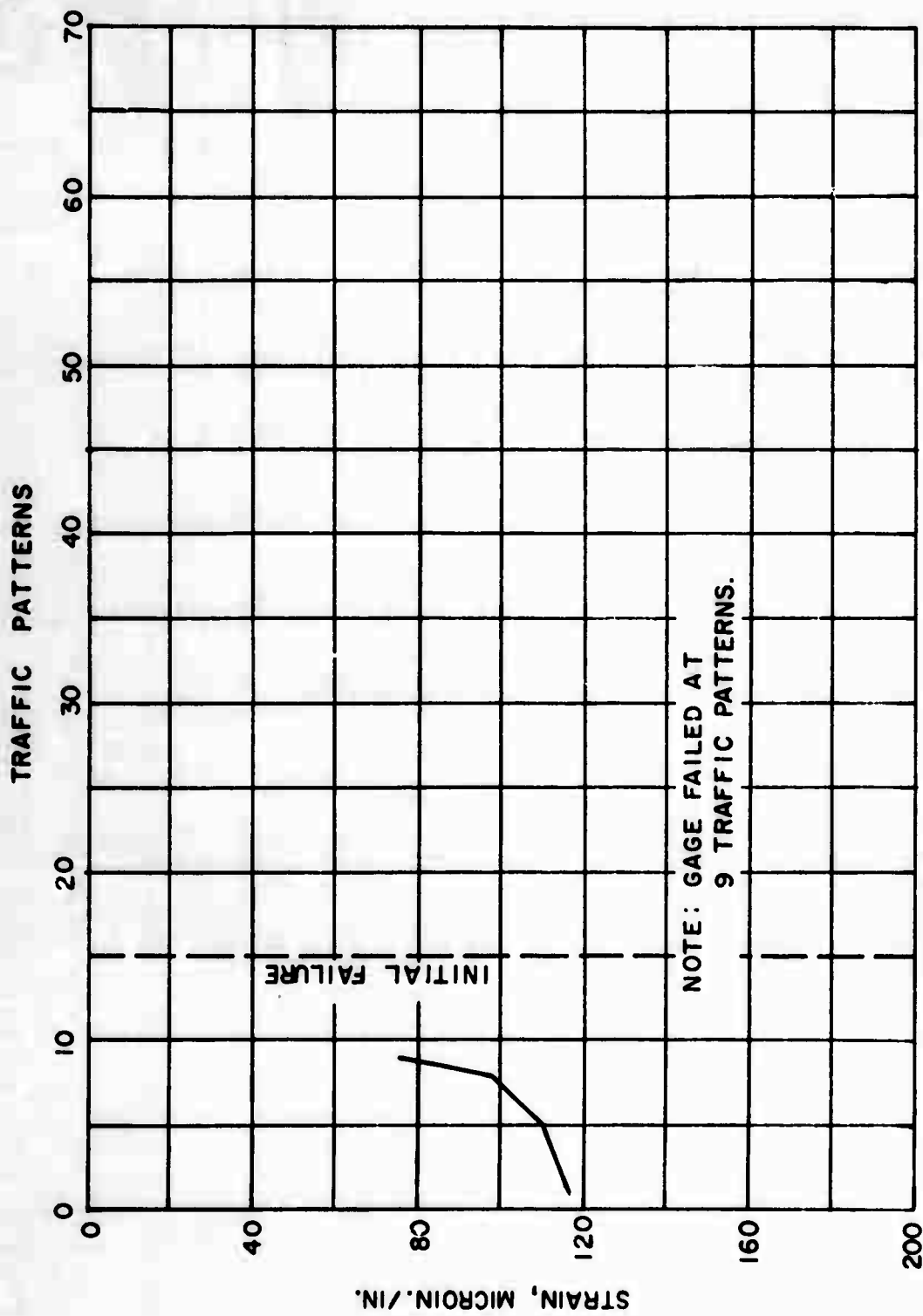


Figure 116. Strain Versus Twin-Tandem Traffic Level, Gage 3NSCL, NE Slab, Item 3, Rigid Pavement Test Section

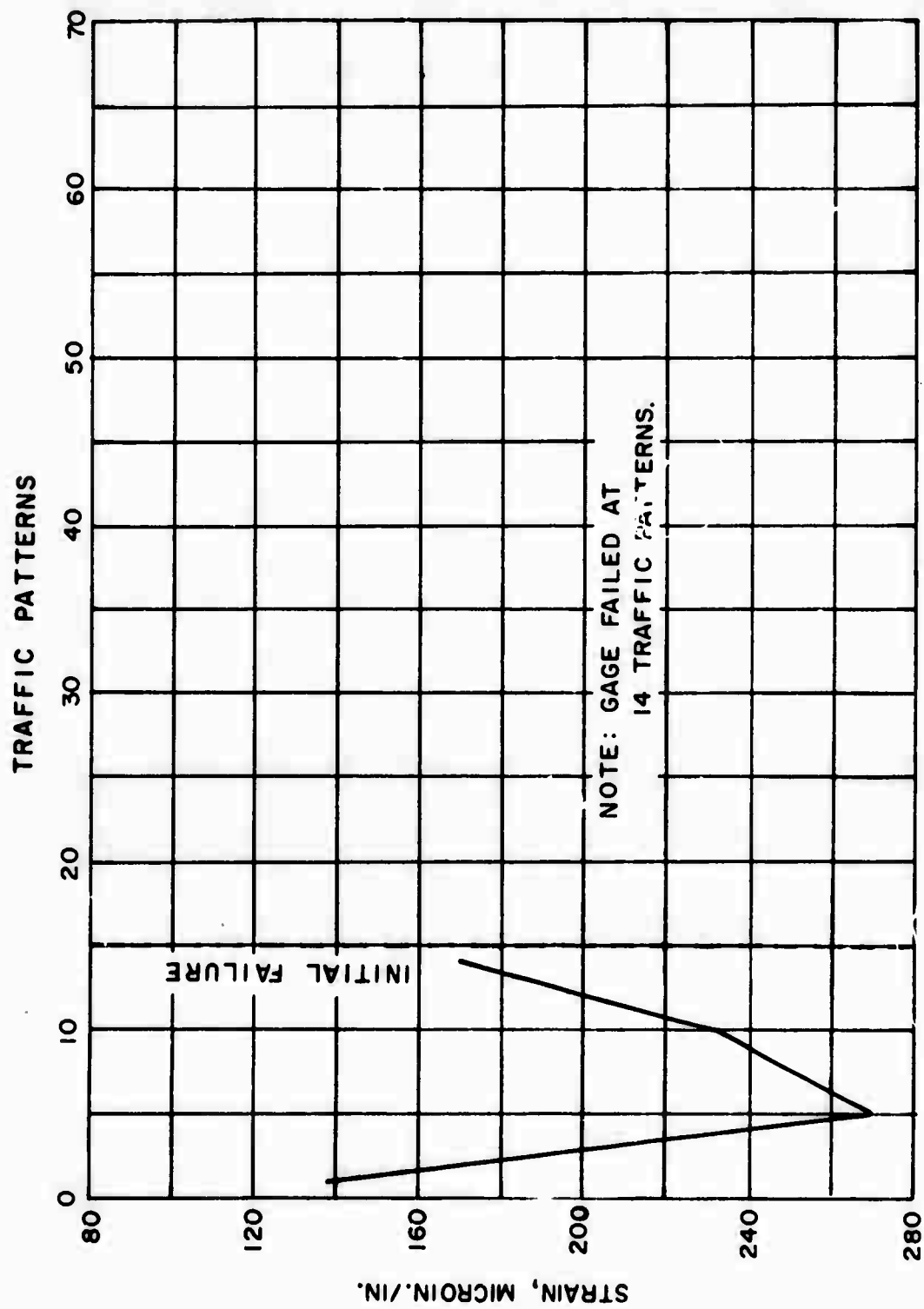


Figure 117. Strain Versus Twin-Tandem Traffic Level, Gage 3NSWJT, NW Slab, Item 3, Rigid Pavement Test Section

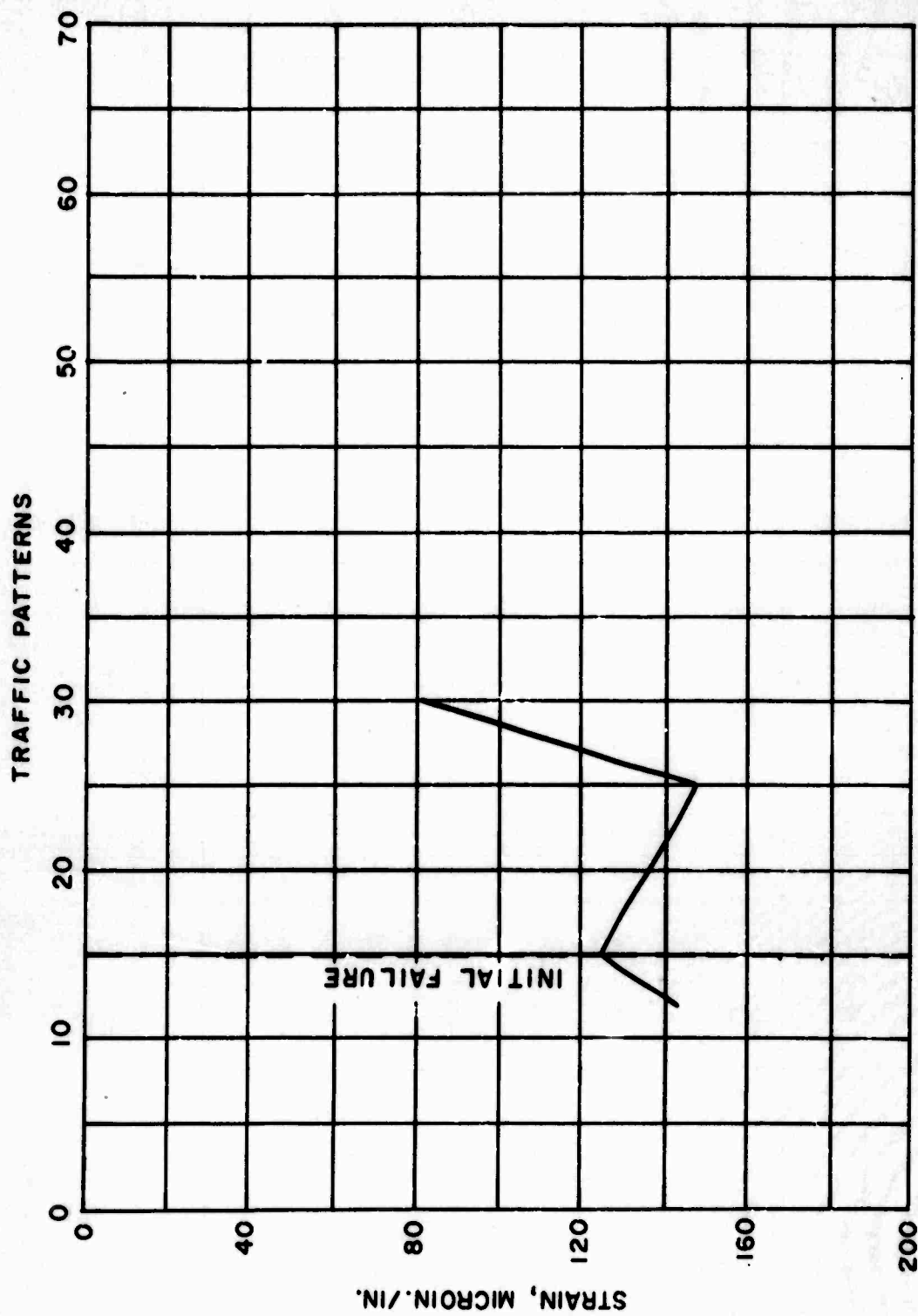


Figure 118. Strain Versus Twin-Tandem Traffic Level, Gage 3NSSEJT, NE Slab, Item 3, Rigid Pavement Test Section

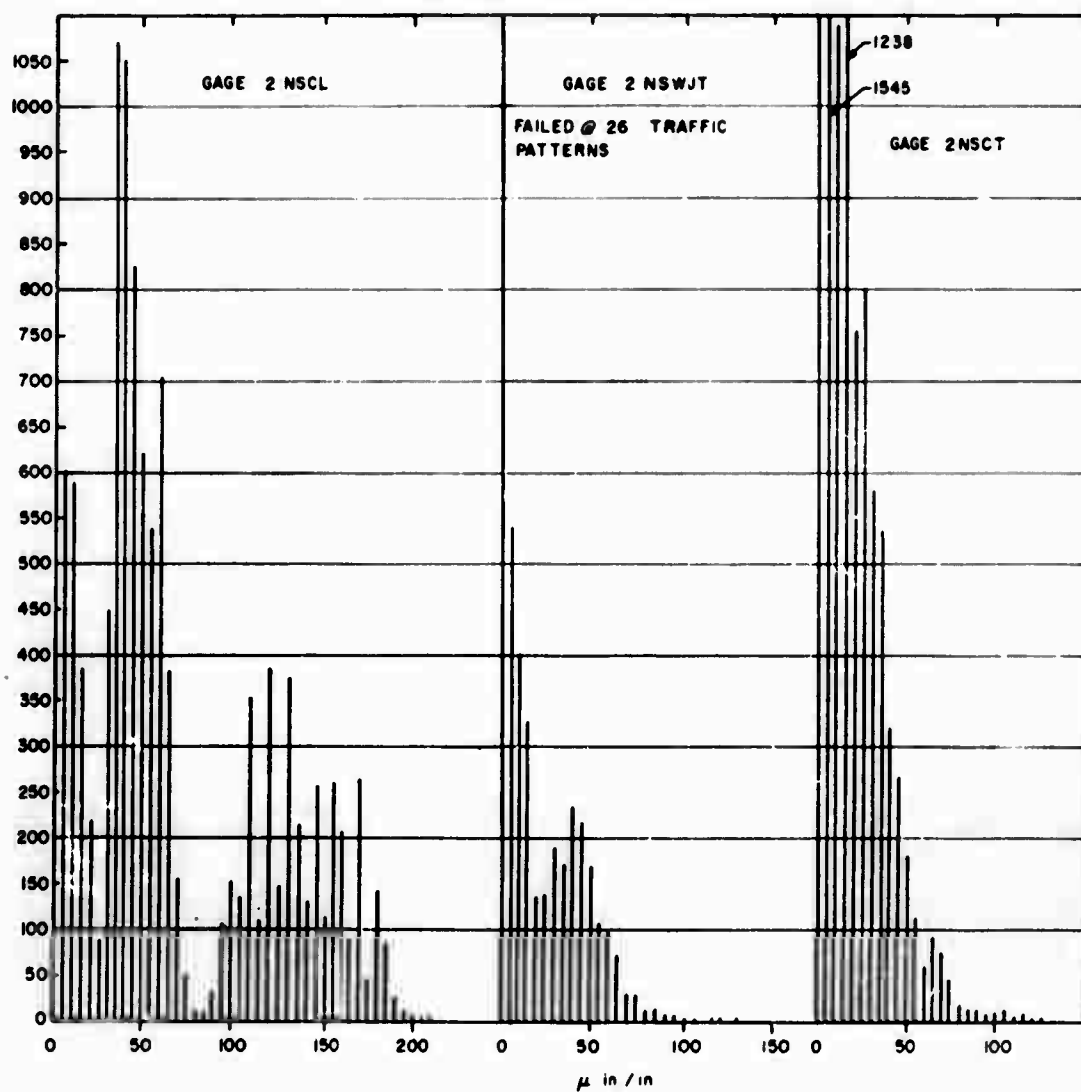


Figure 119. Histograms for Strain Excursions Under Twin-Tandem Traffic, Item 2, Rigid Pavement Test Section

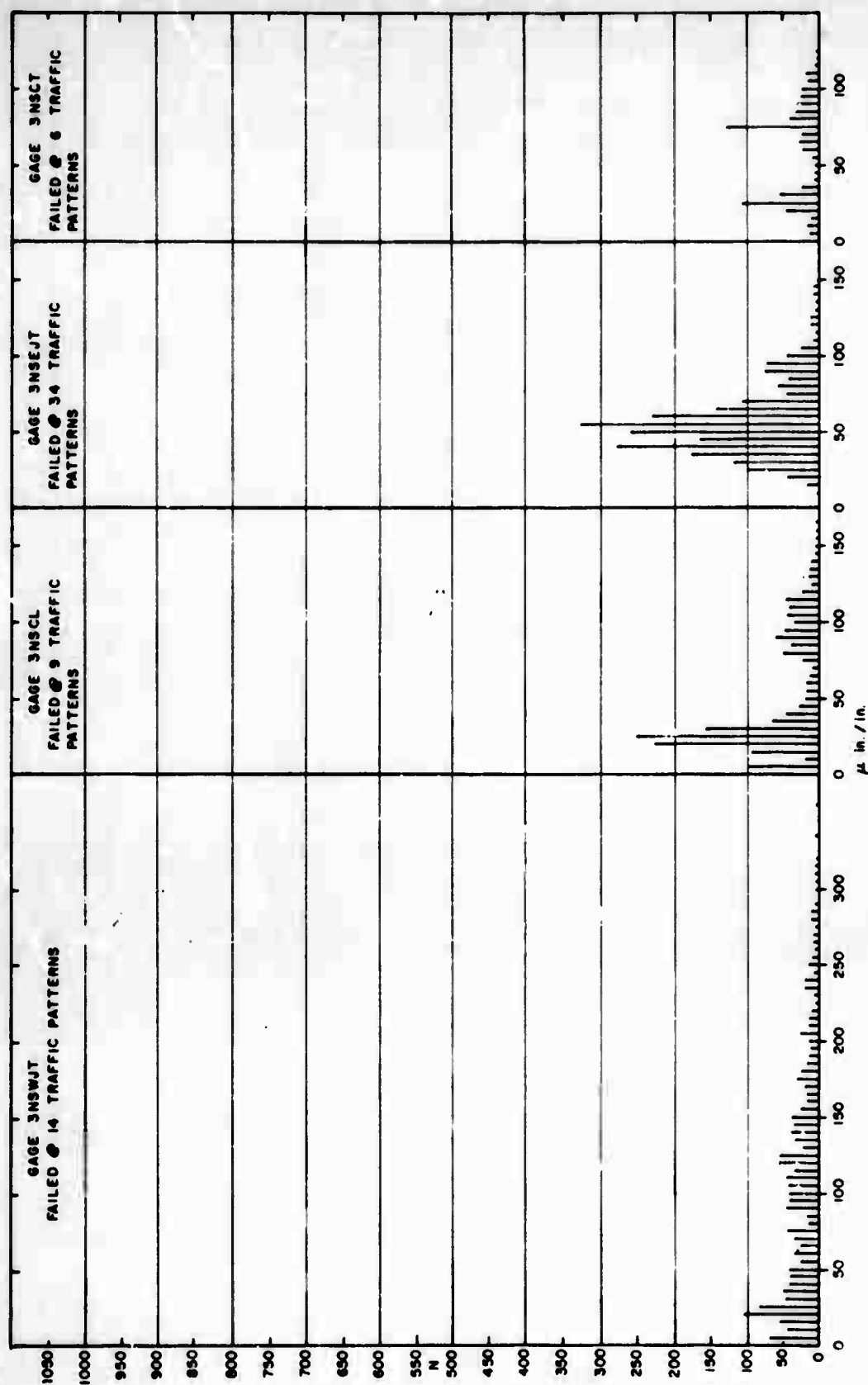


Figure 120. Histograms for Strain Excursions Under Twin-Tandem Traffic, Item 3, Rigid Pavement Test Section

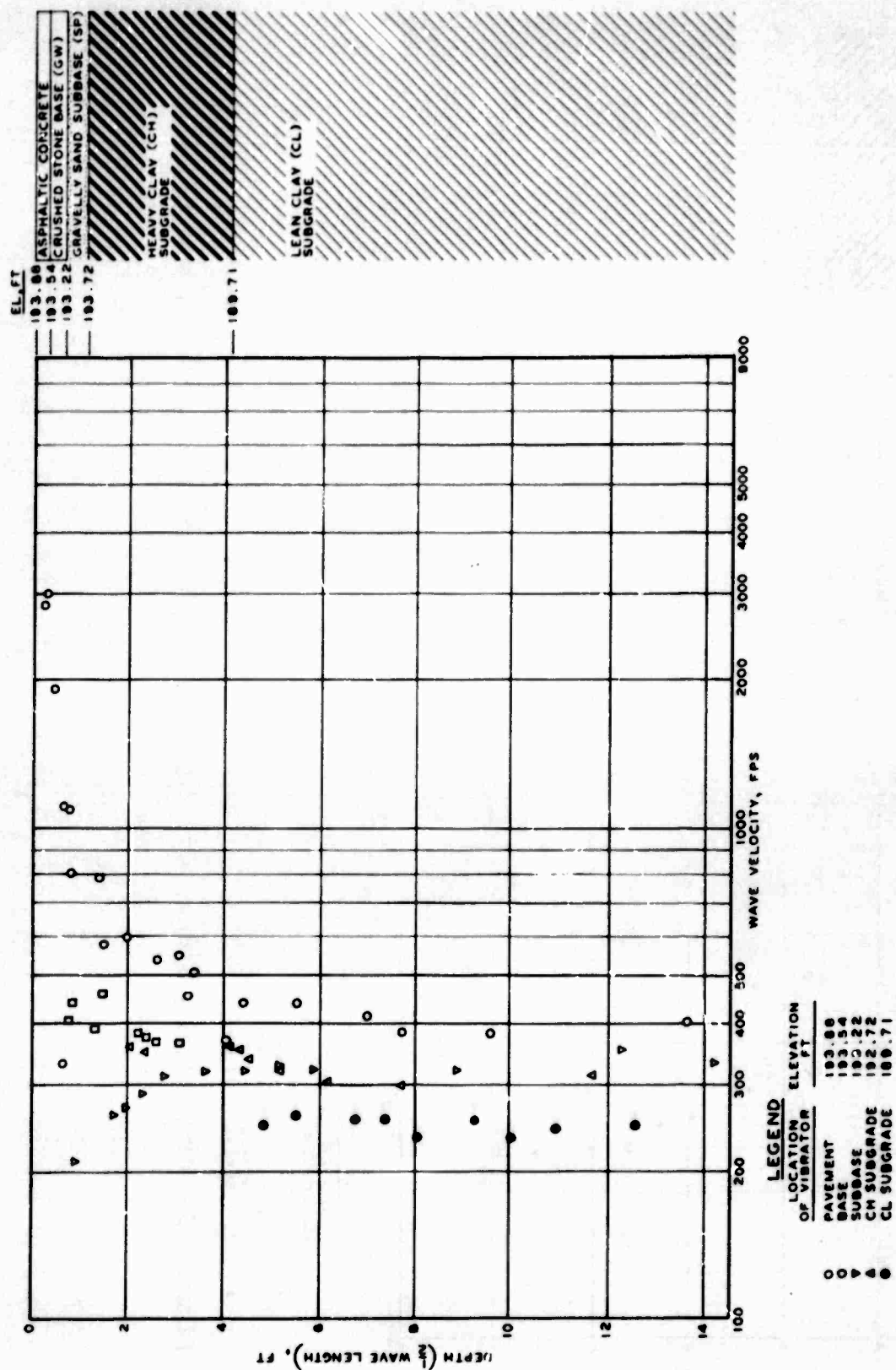
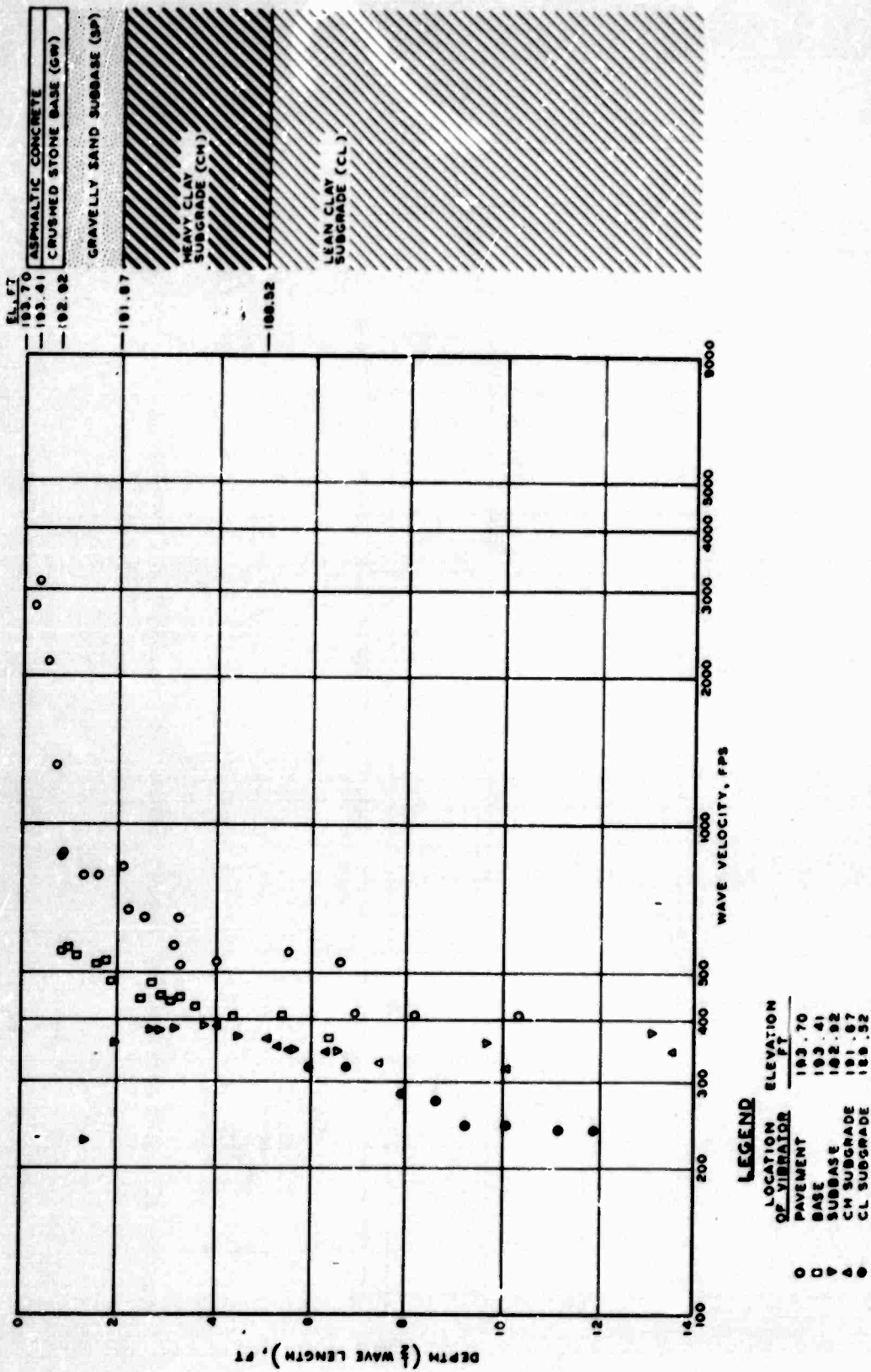


Figure 121. Wave Velocity Versus Depth for Flexible Pavement Lane 1, Item 1, As Constructed



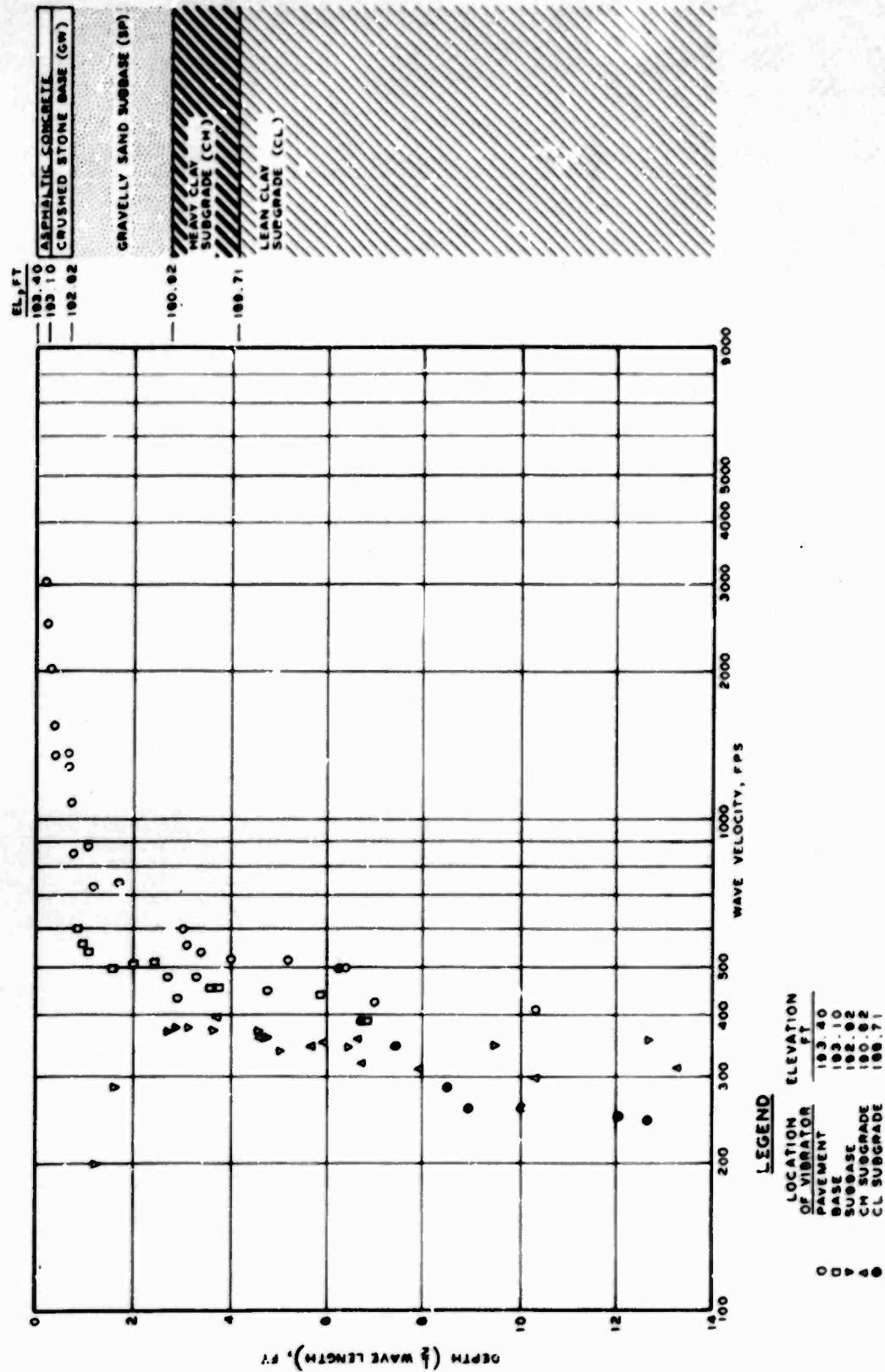


Figure 123. Wave Velocity Versus Depth for Flexible Pavement Lane 1, Item 3, As Constructed

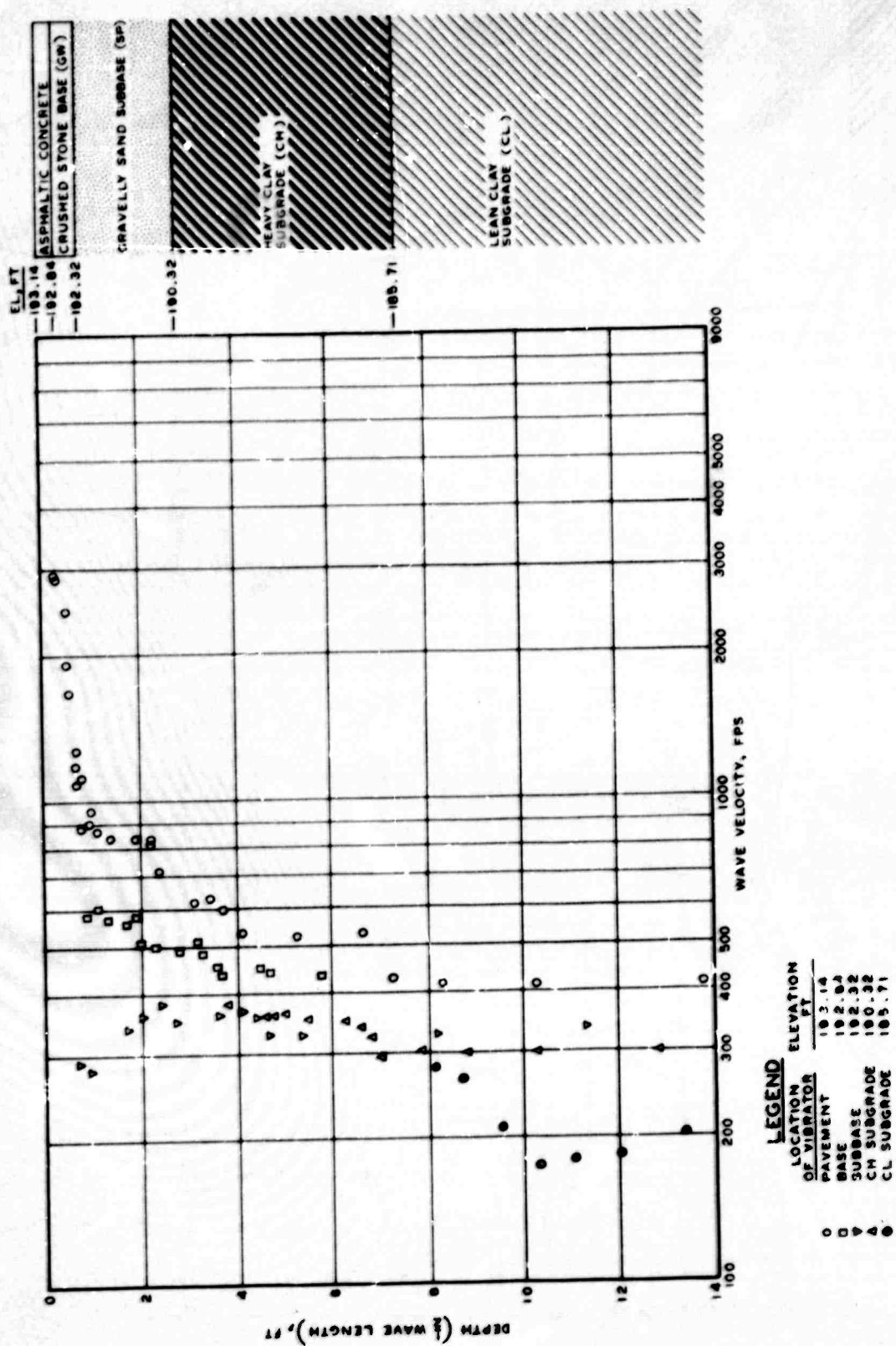


Figure 124. Wave Velocity Versus Depth for Flexible Pavement Lane 1, Item 4, As Constructed

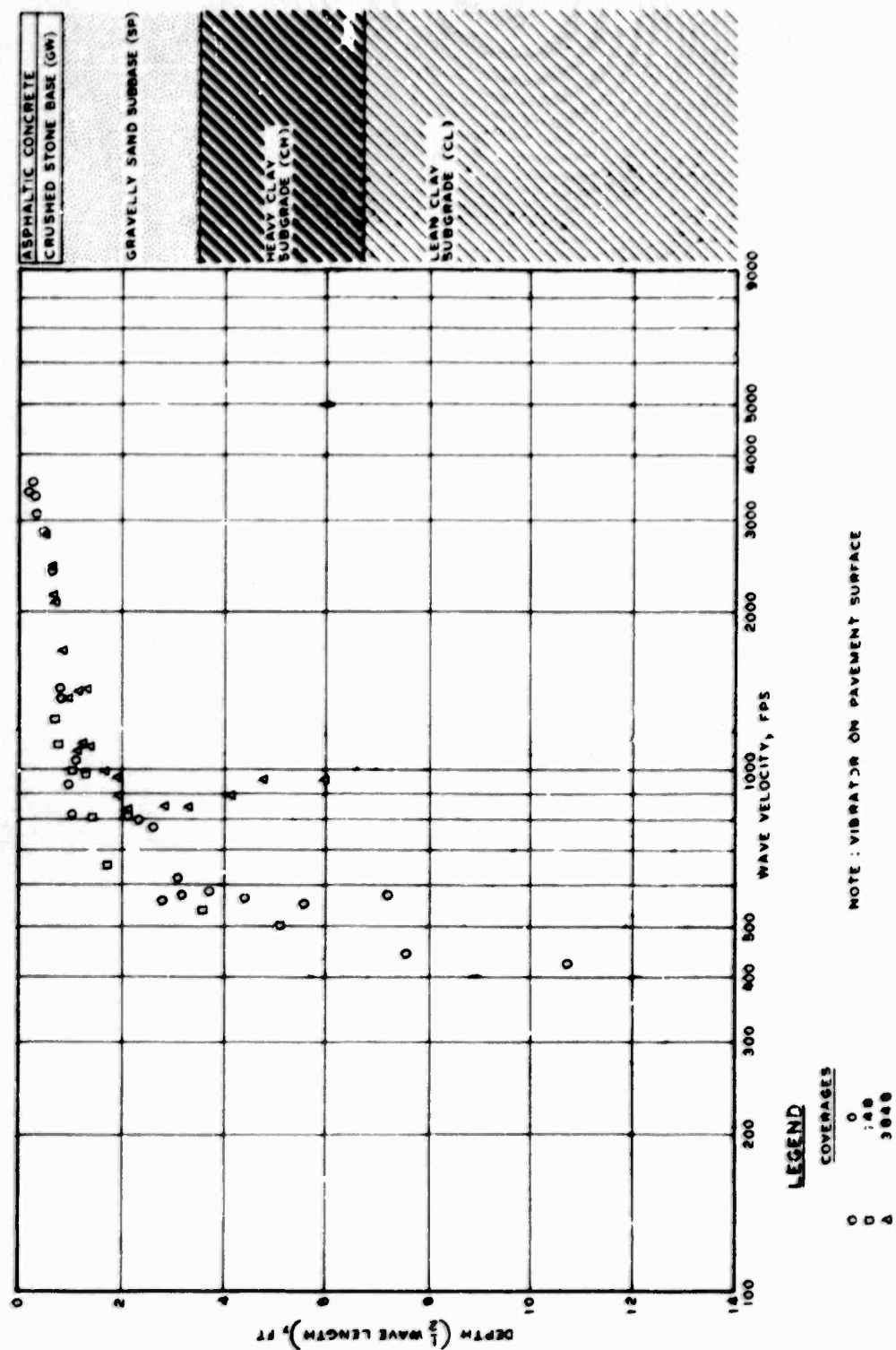


Figure 125. Wave Velocity Versus Depth for Flexible Pavement Lane 1, Item 5, As Constructed

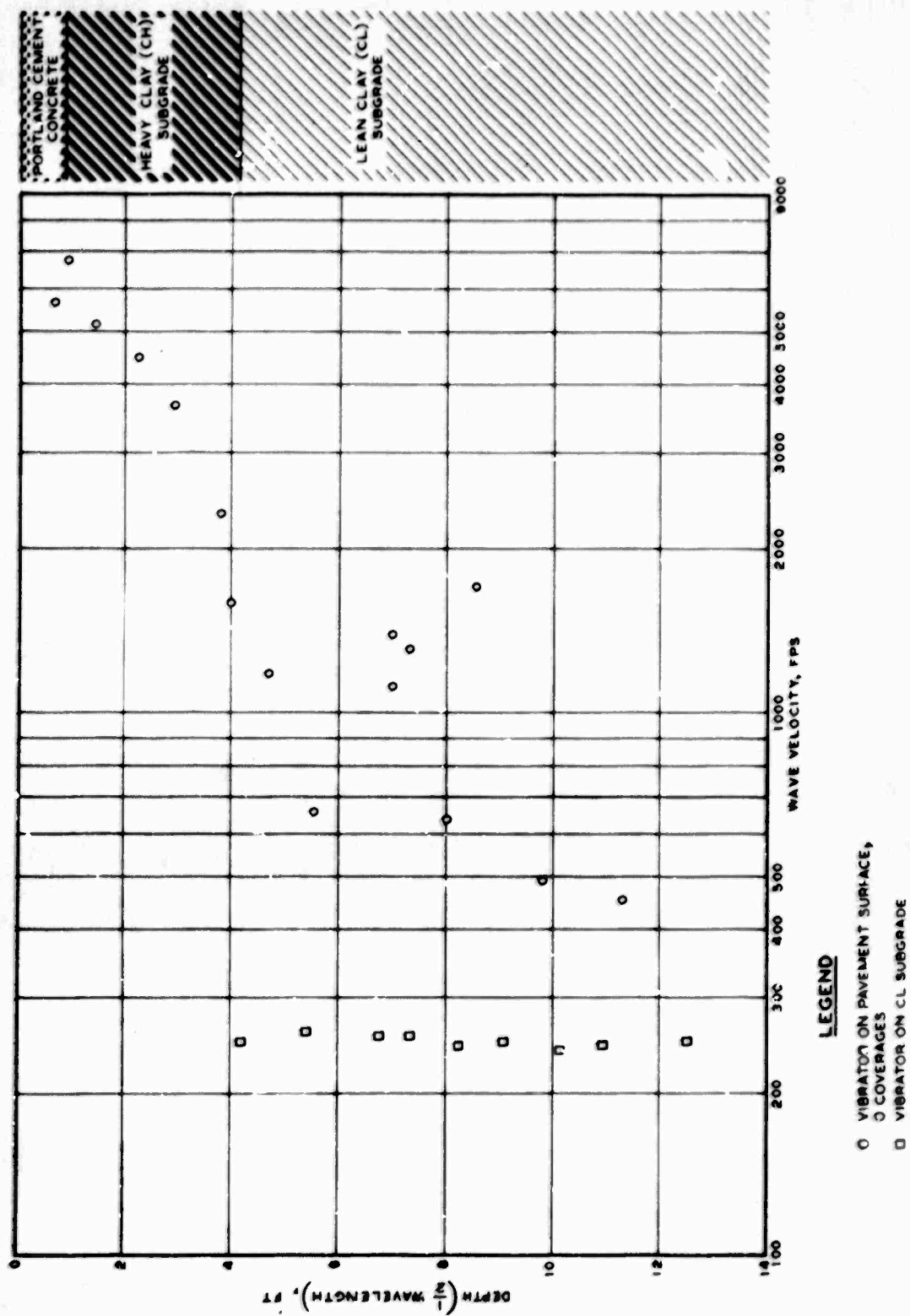


Figure 126. Wave Velocity Versus Depth for Rigid Pavement Item 1, South Lane, As Constructed

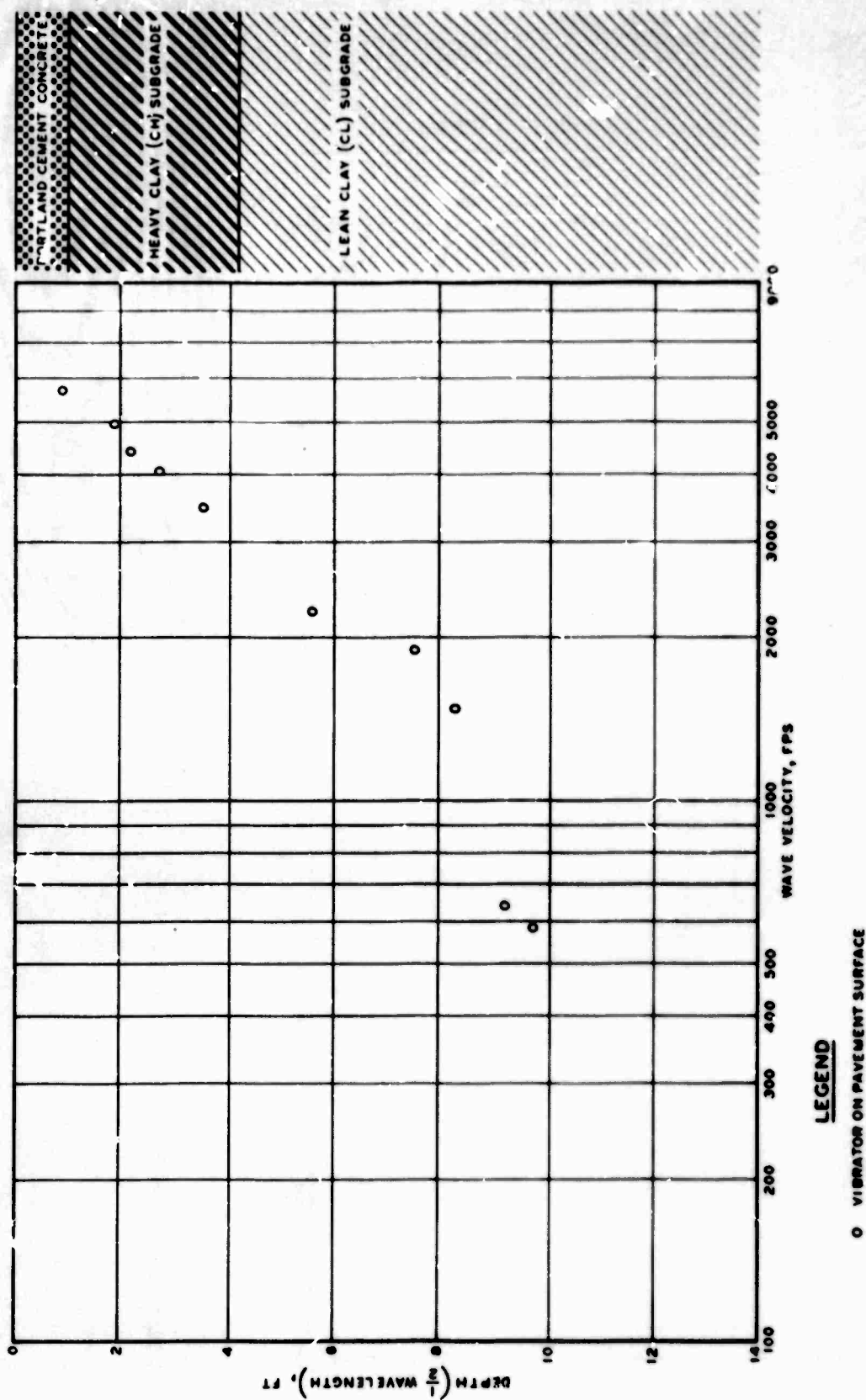


Figure 127. Wave Velocity Versus Depth for Rigid Pavement Item 2, South Lane, As Constructed

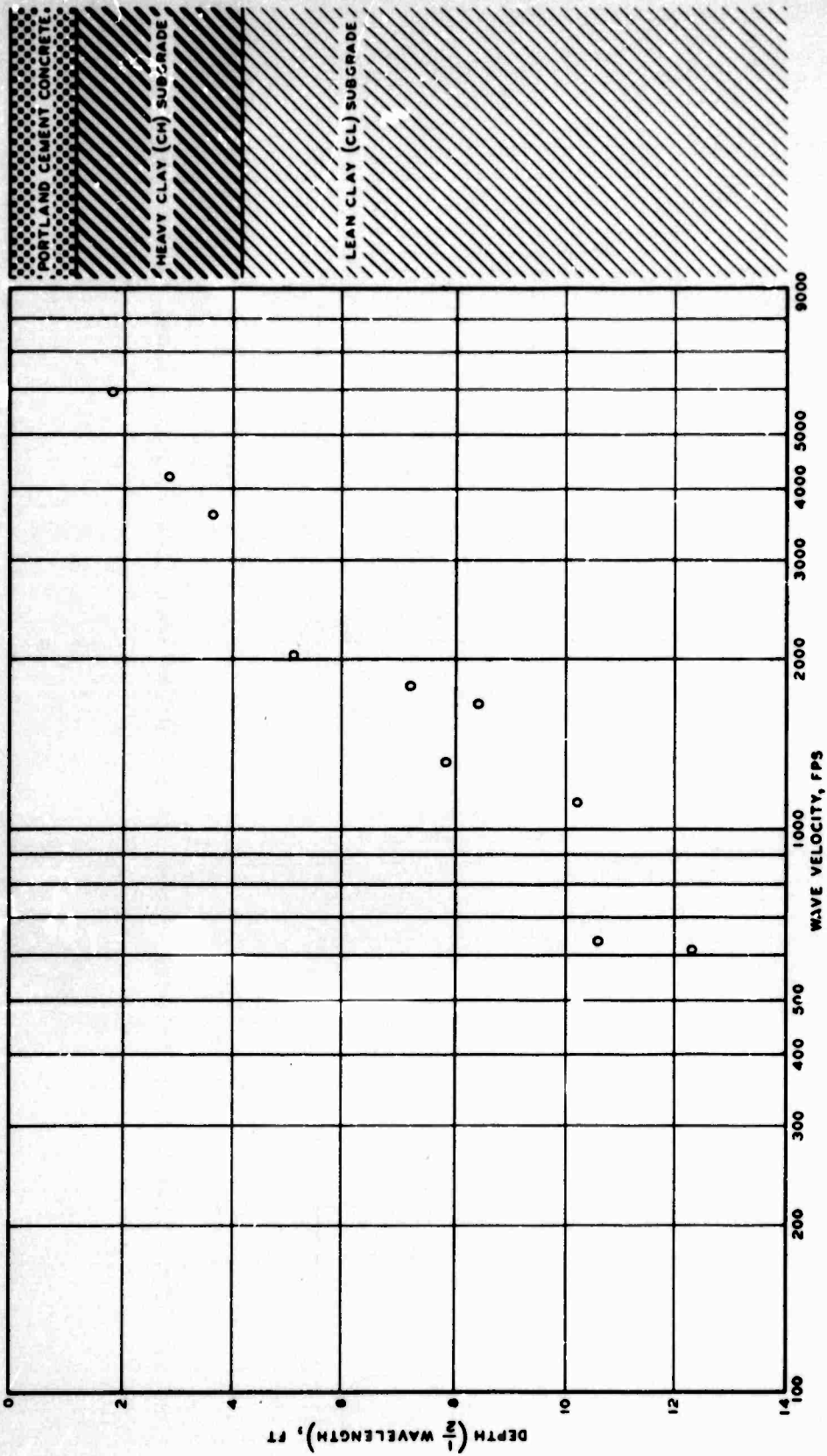


Figure 128. Wave Velocity Versus Depth for Rigid Pavement Item 3, South Lane, As Constructed

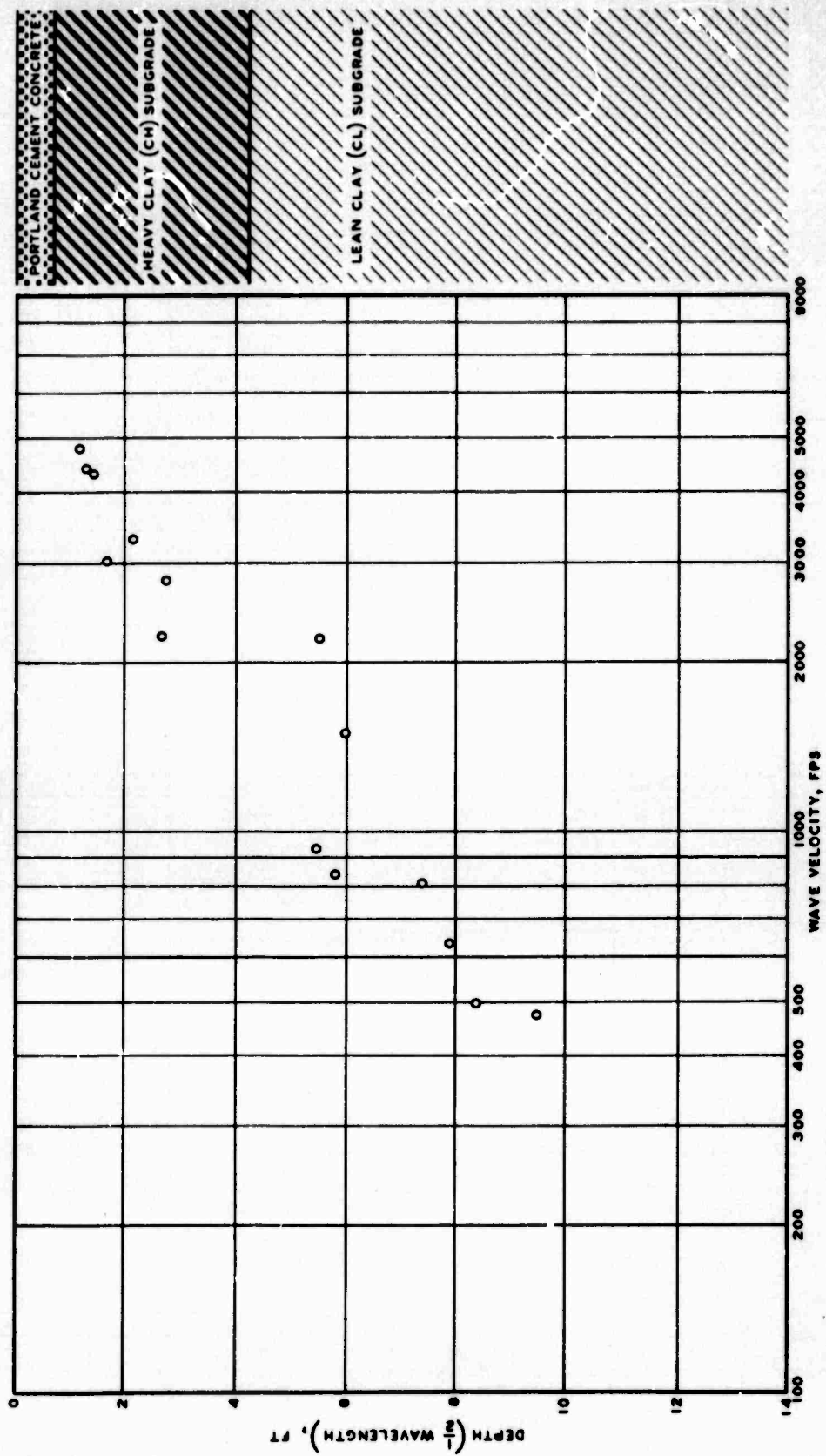


Figure 129. Wave Velocity Versus Depth for Rigid Pavement Item 4, South Lane, As Constructed

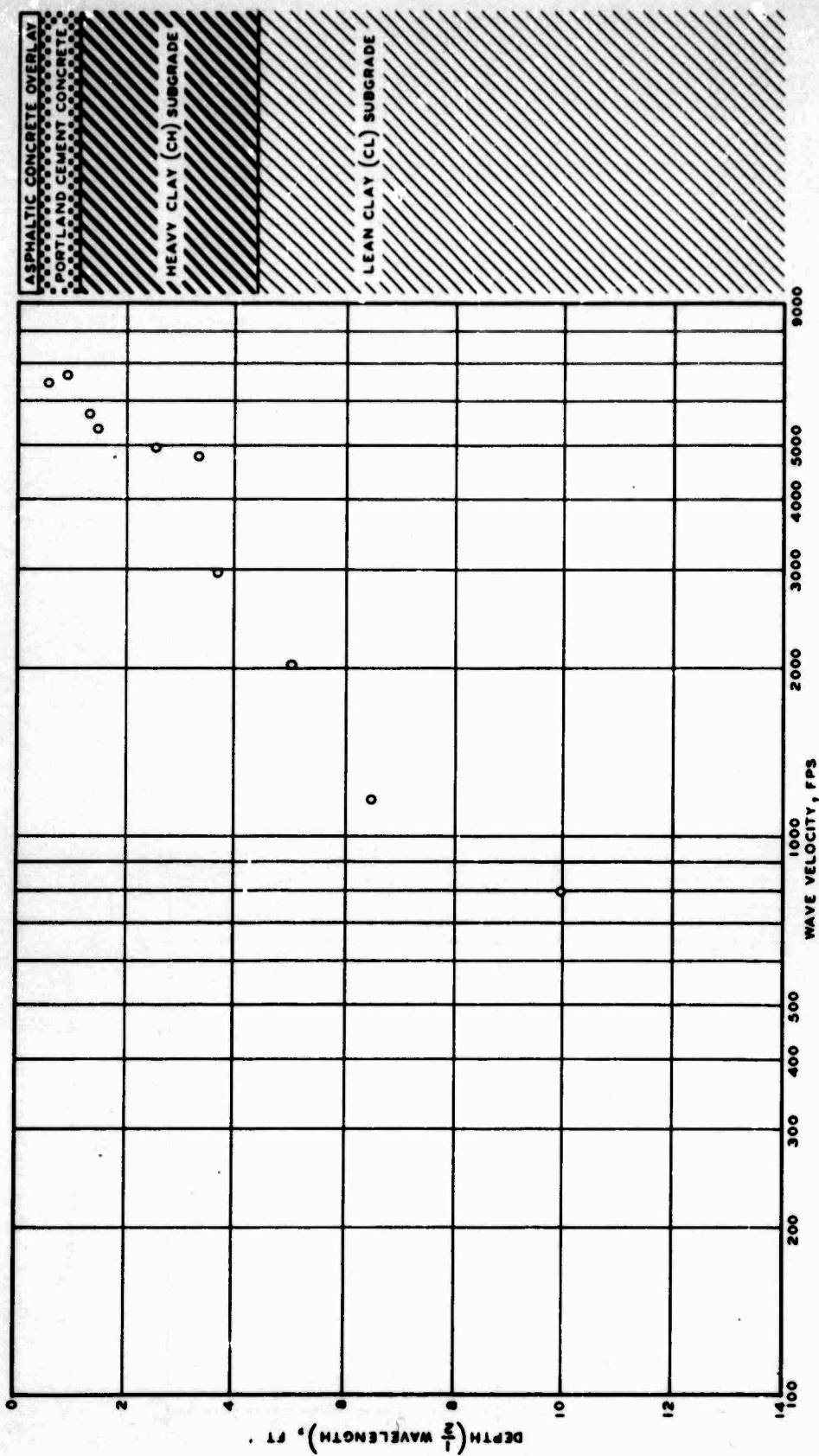
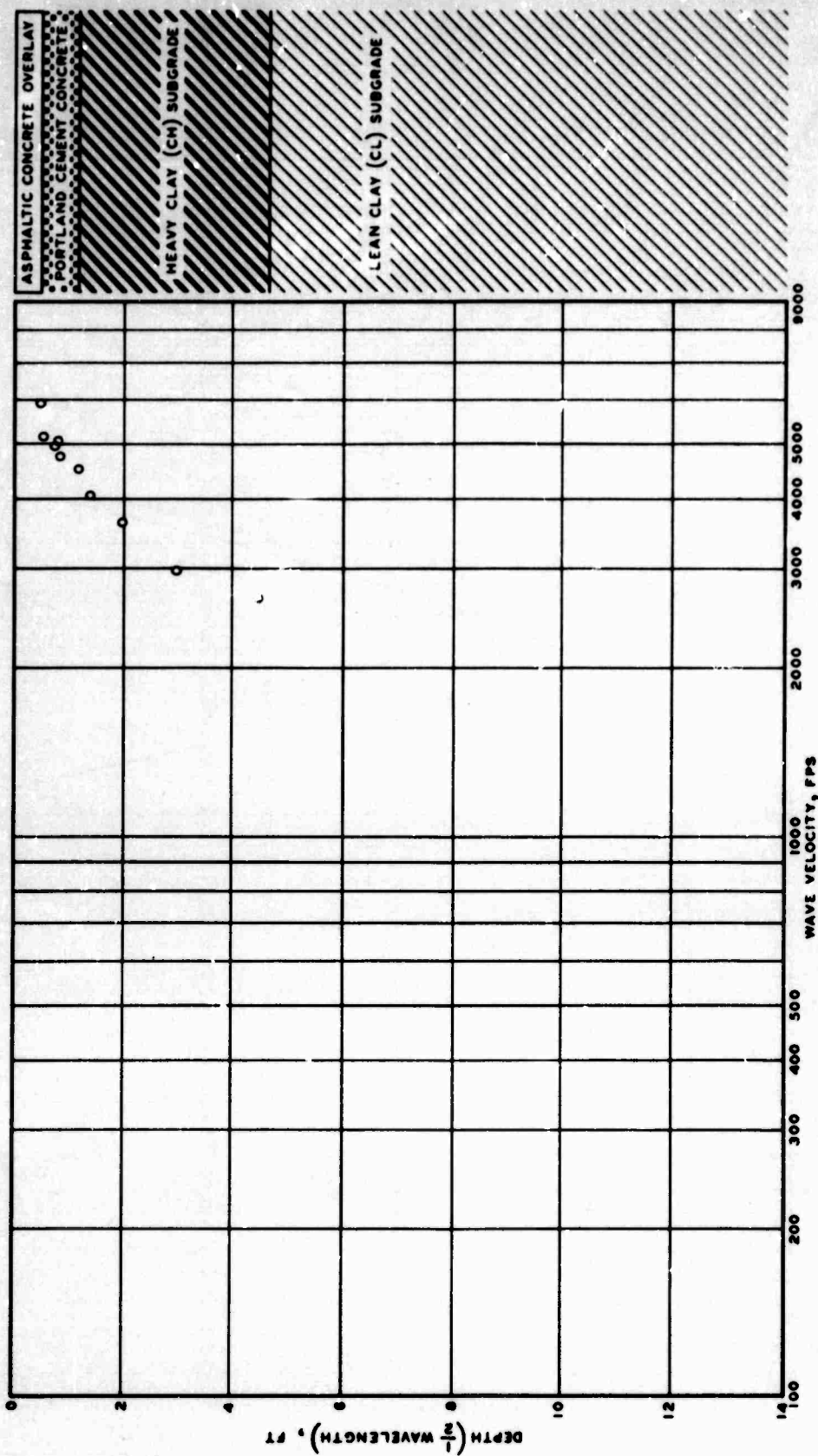


Figure 130. Wave Velocity Versus Depth for Rigid Pavement with Nonrigid Overlay, Item 1, North Lane, As Constructed



LEGEND

O VIBRATOR ON PAVEMENT SURFACE

Figure 131. Wave Velocity Versus Depth for Rigid Pavement with Nonrigid Overlay, Item 4, North Lane, As Constructed

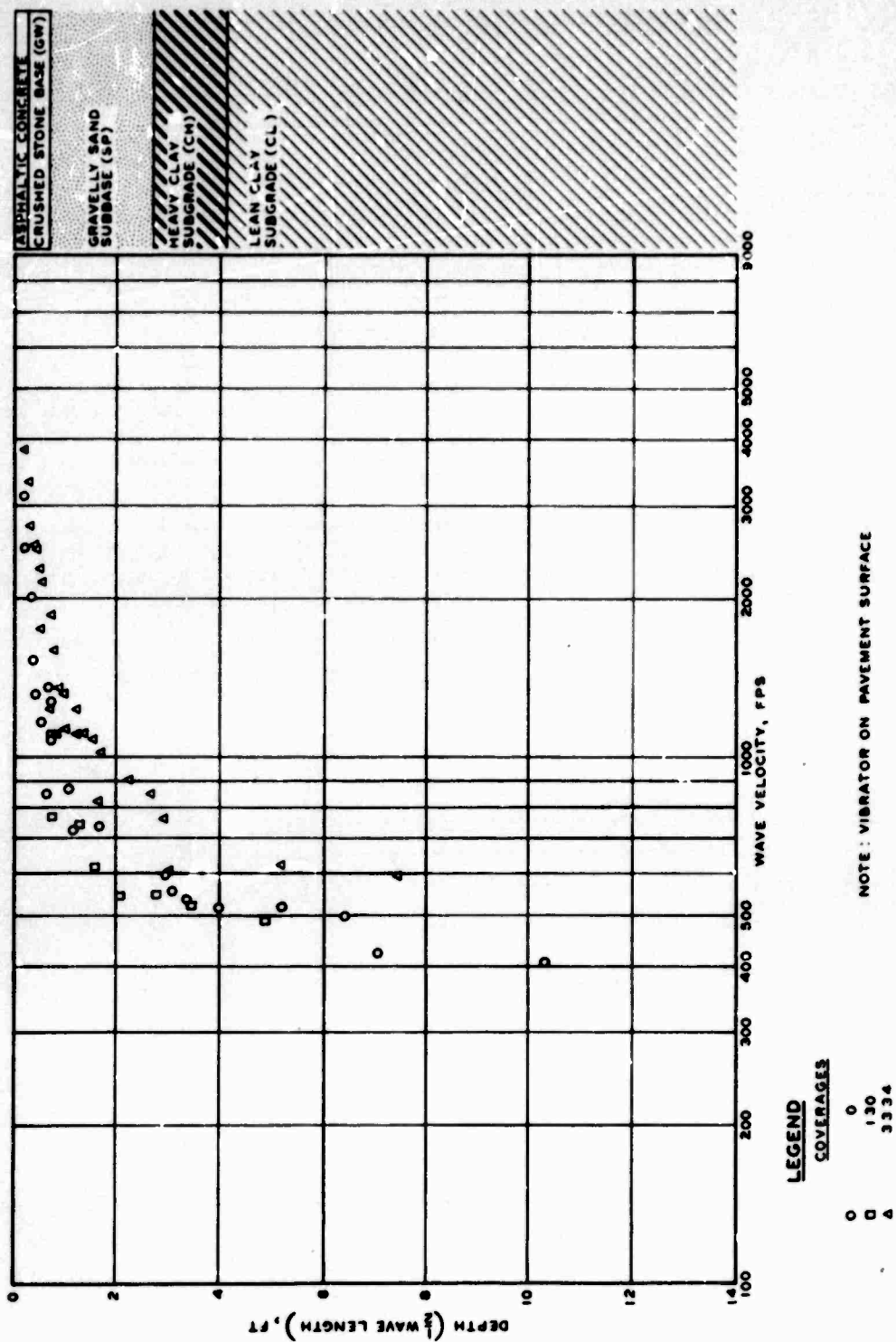


Figure 132. Wave Velocity Versus Depth for Flexible Pavement Lane 1, Item 3, During Traffic Tests

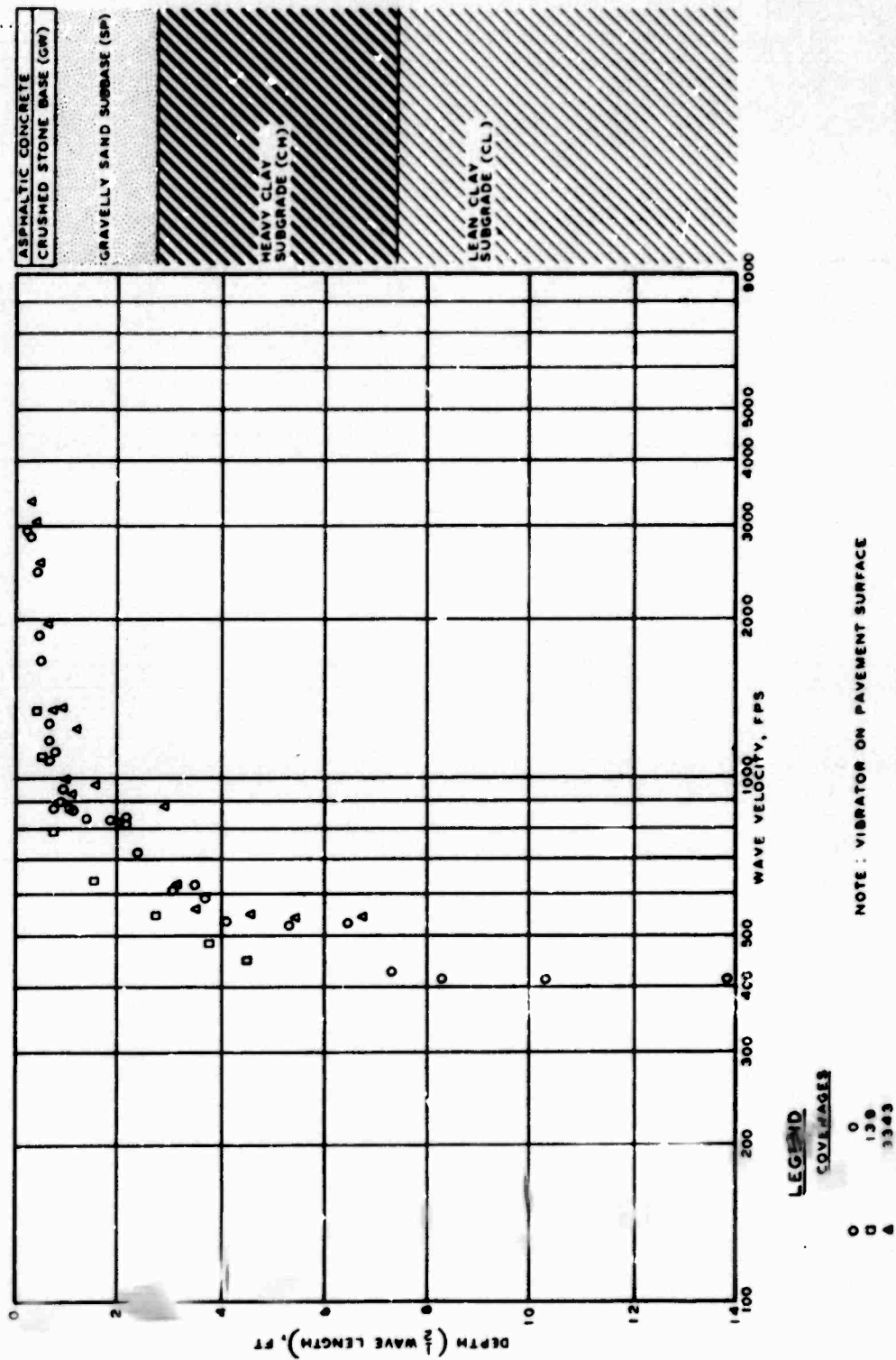


Figure 133. Wave Velocity Versus Depth for Flexible Pavement Lane 1, Item 4, During Traffic Tests

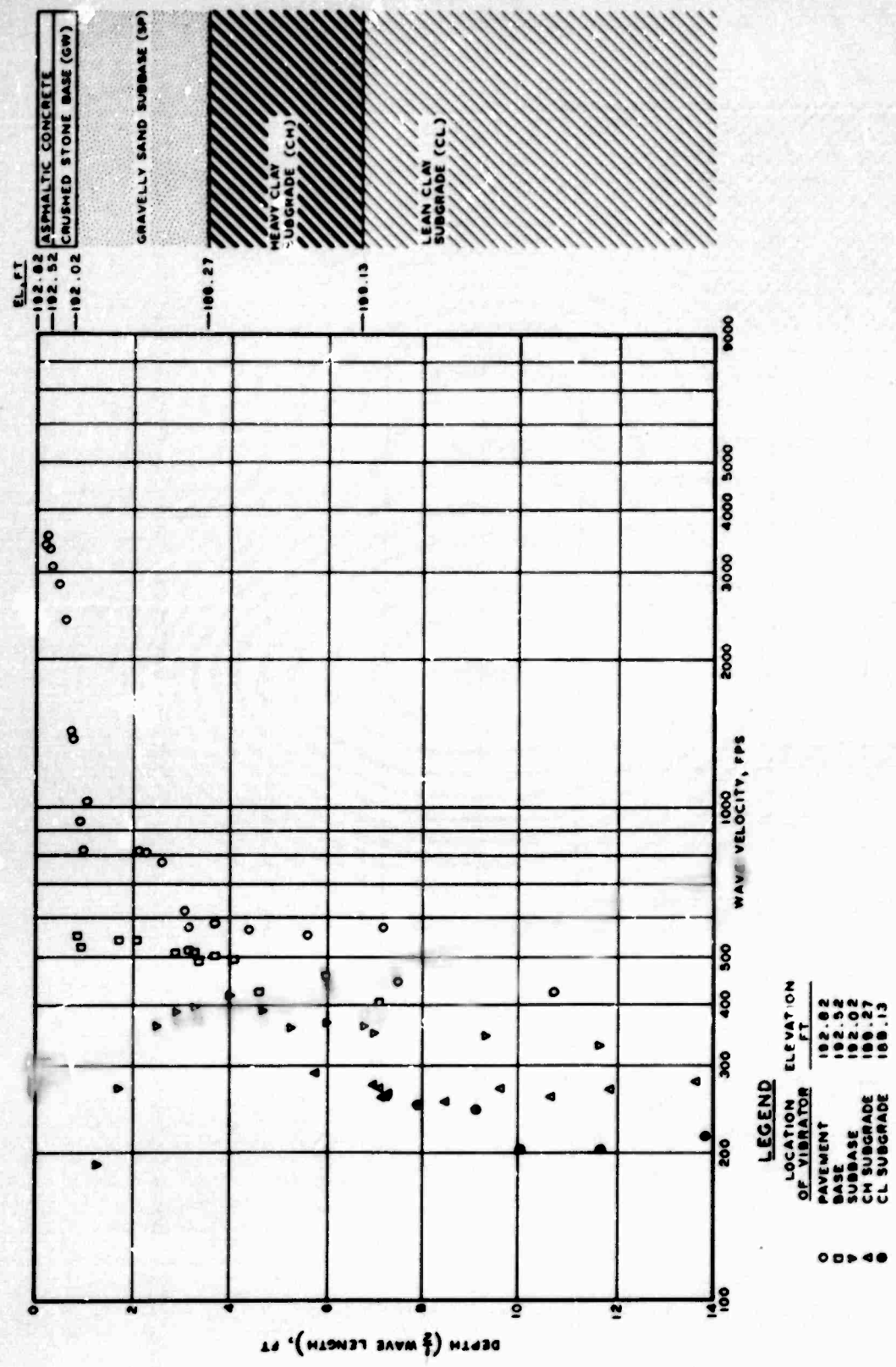


Figure 134. Wave Velocity Versus Depth for Flexible Pavement Lane 1, Item 5, During Traffic Tests

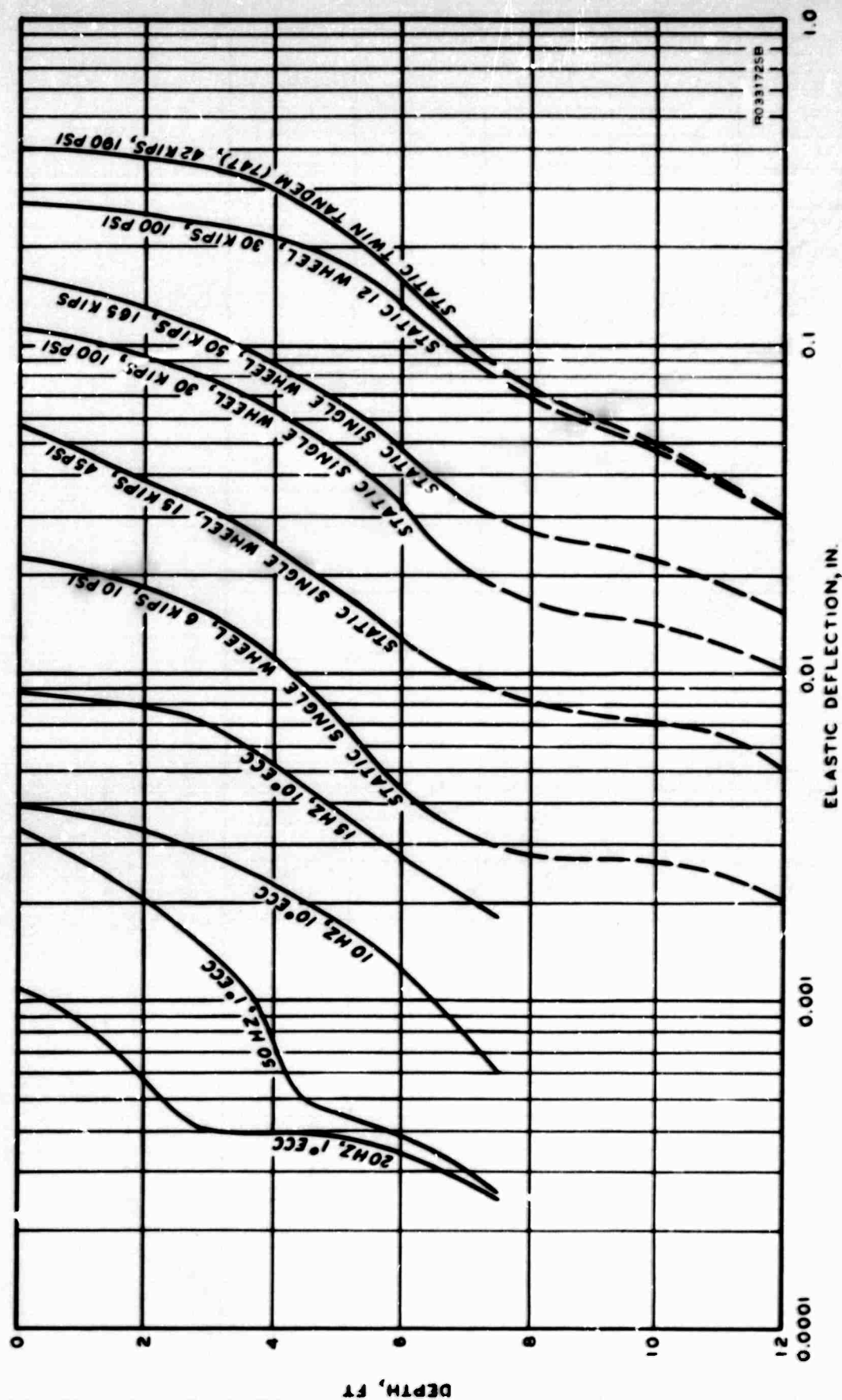


Figure 135. Deflection Versus Depth for Static and Vibratory Loading of Flexible Pavement, Lane 1, Item 4

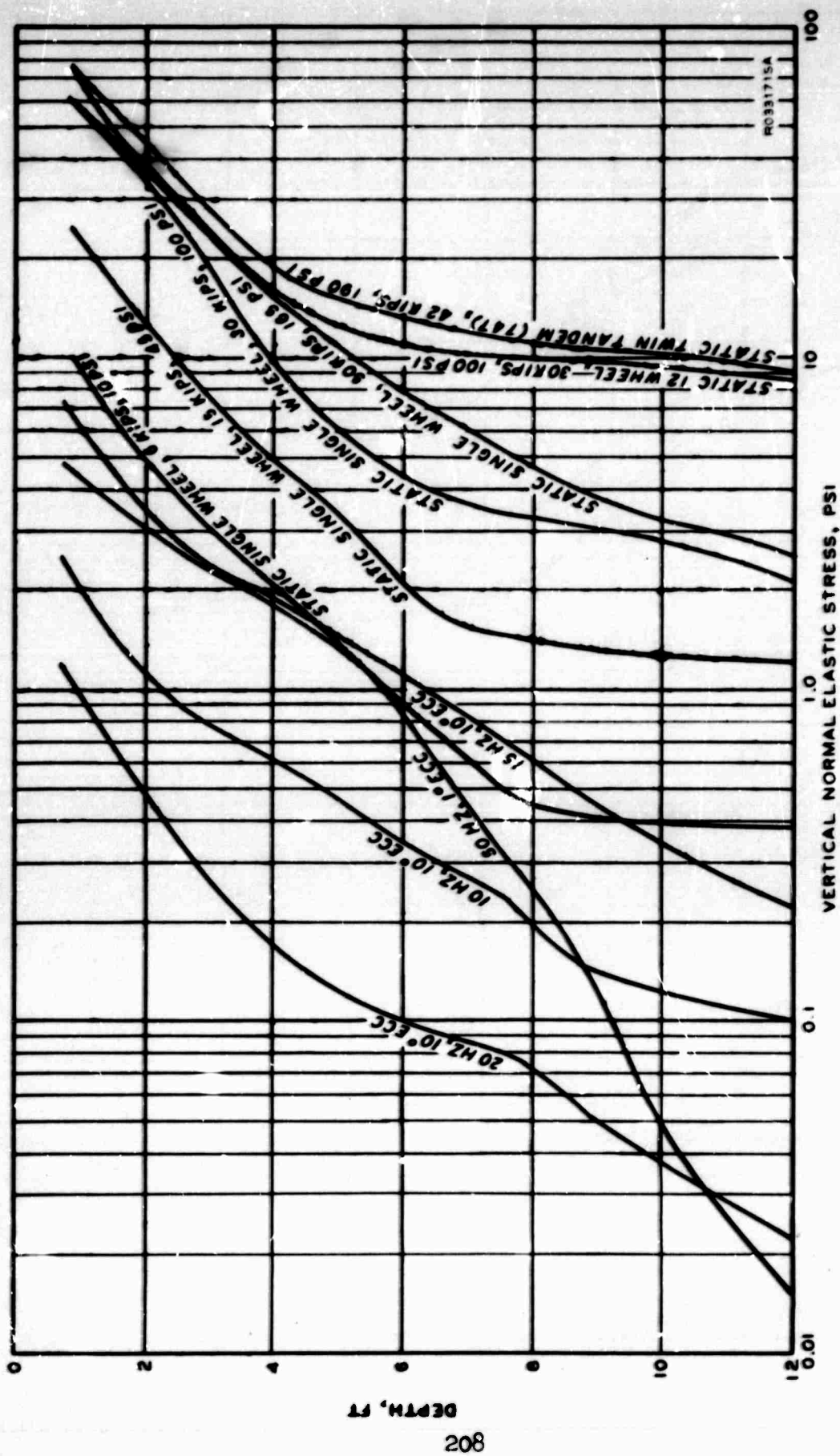


Figure 136. Stress Versus Depth for Static and Vibratory Loading of Flexible Pavement, Lane 1, Item 4

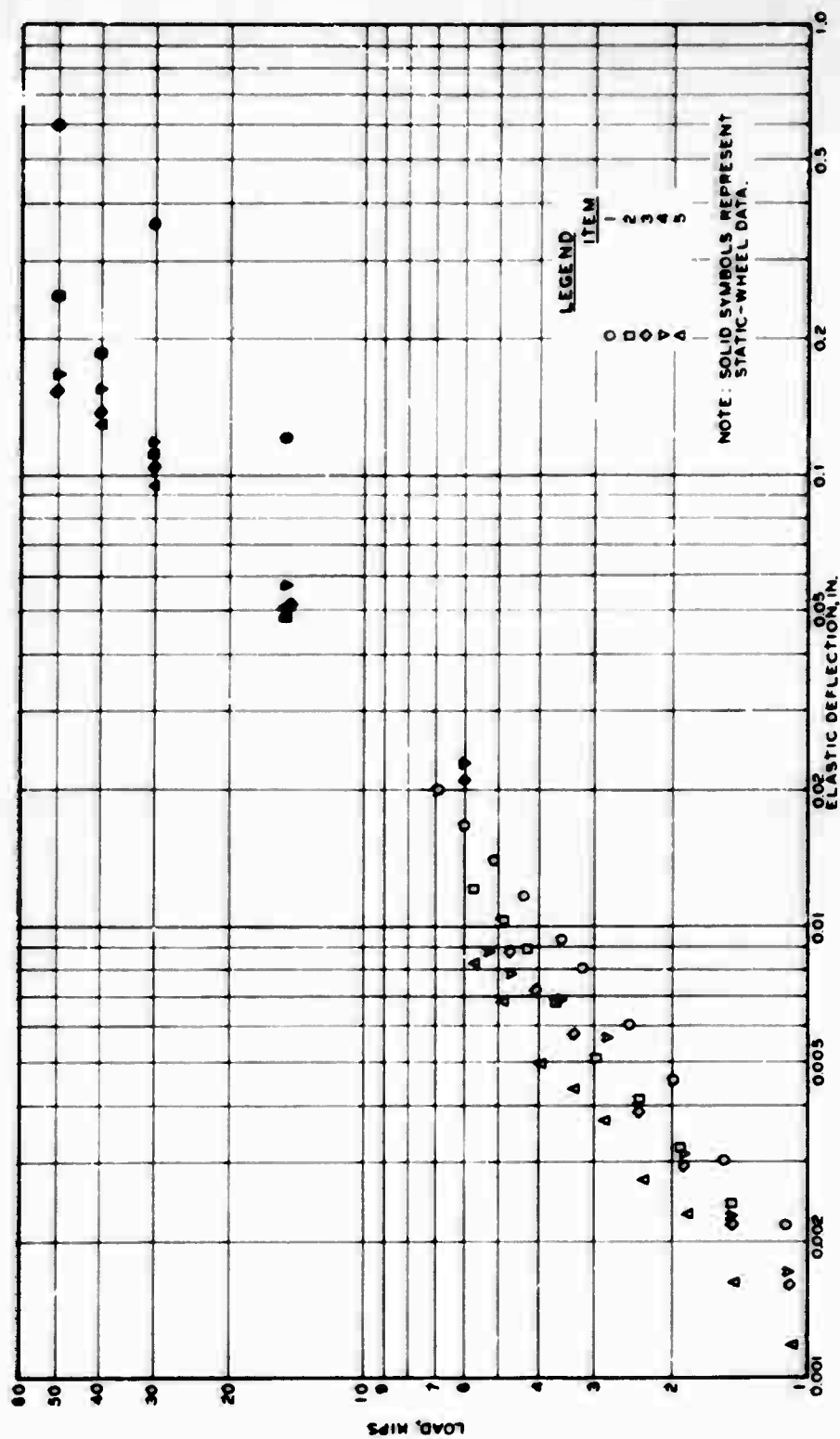


Figure 137. Deflection Versus Load for Flexible Pavement Lane 1, As Constructed

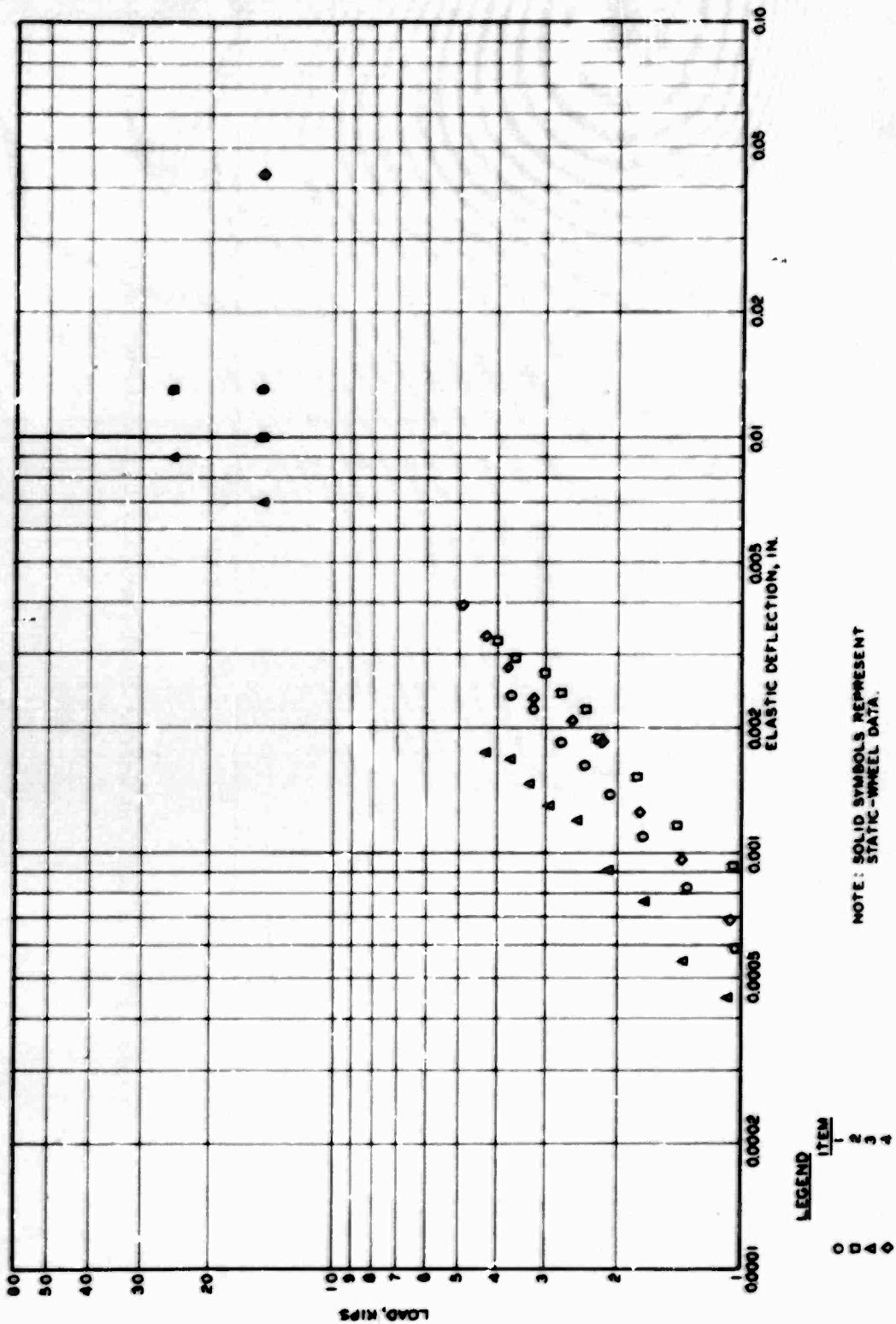


Figure 138. Deflection versus Load for Rigid Pavement, South Lane, As Constructed

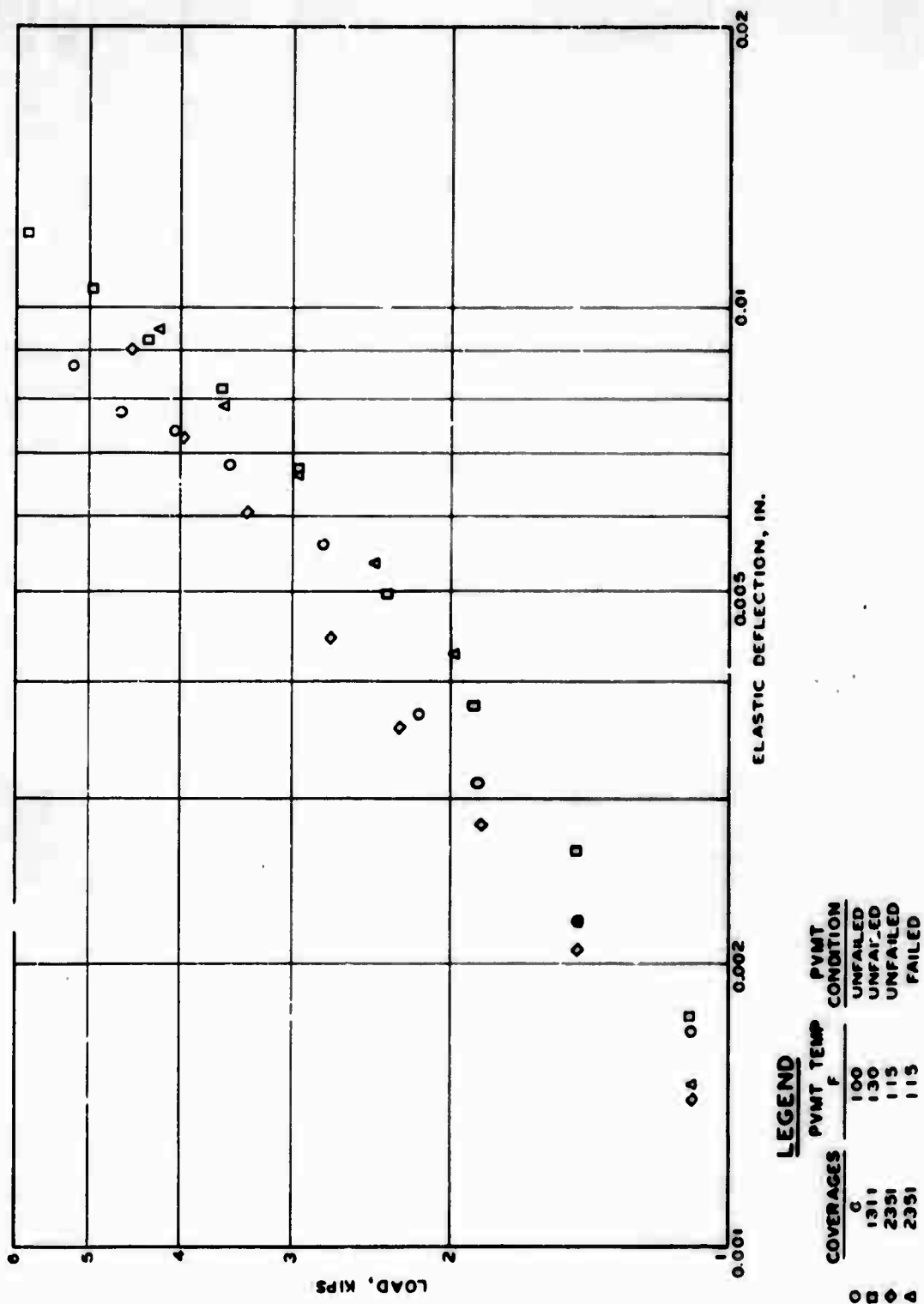
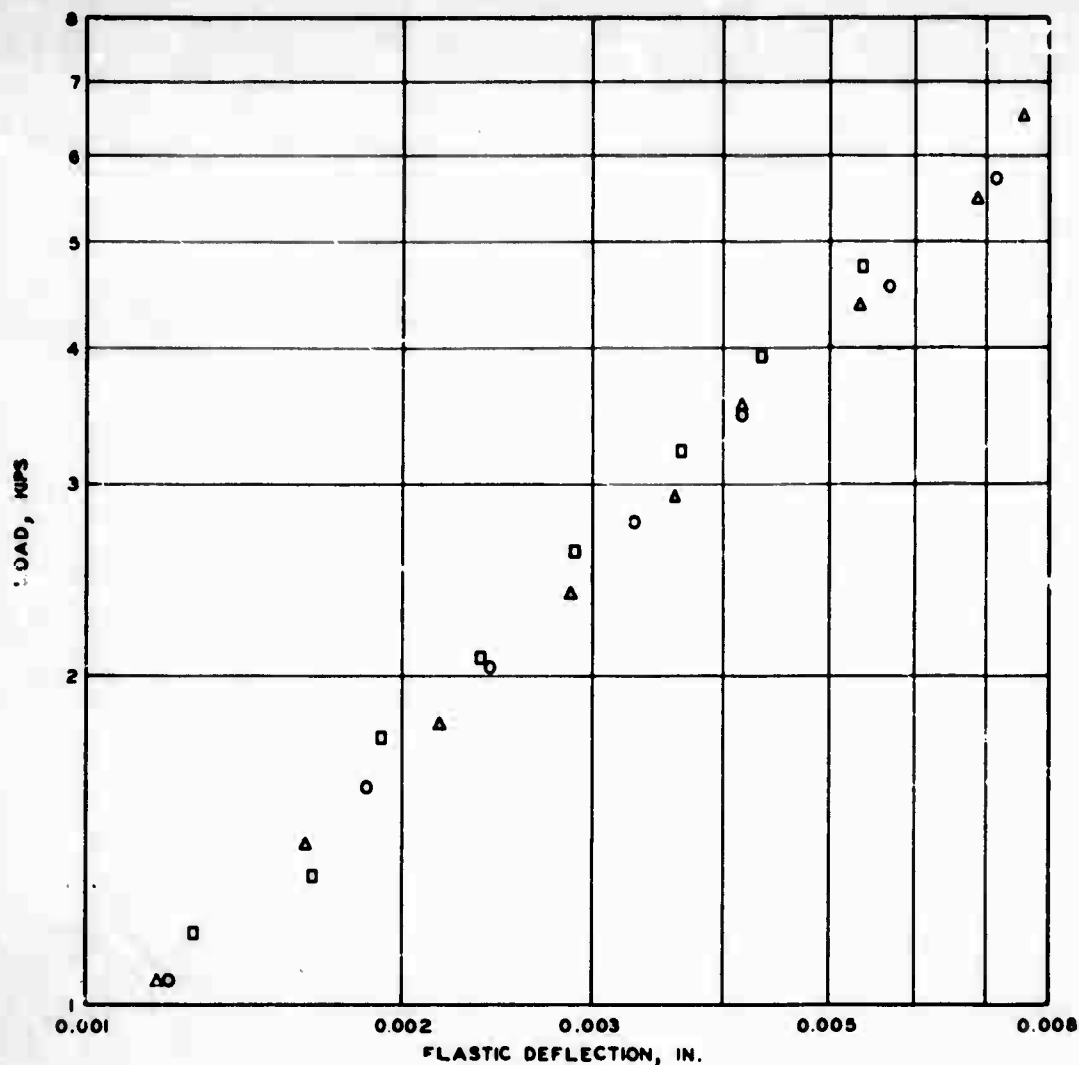


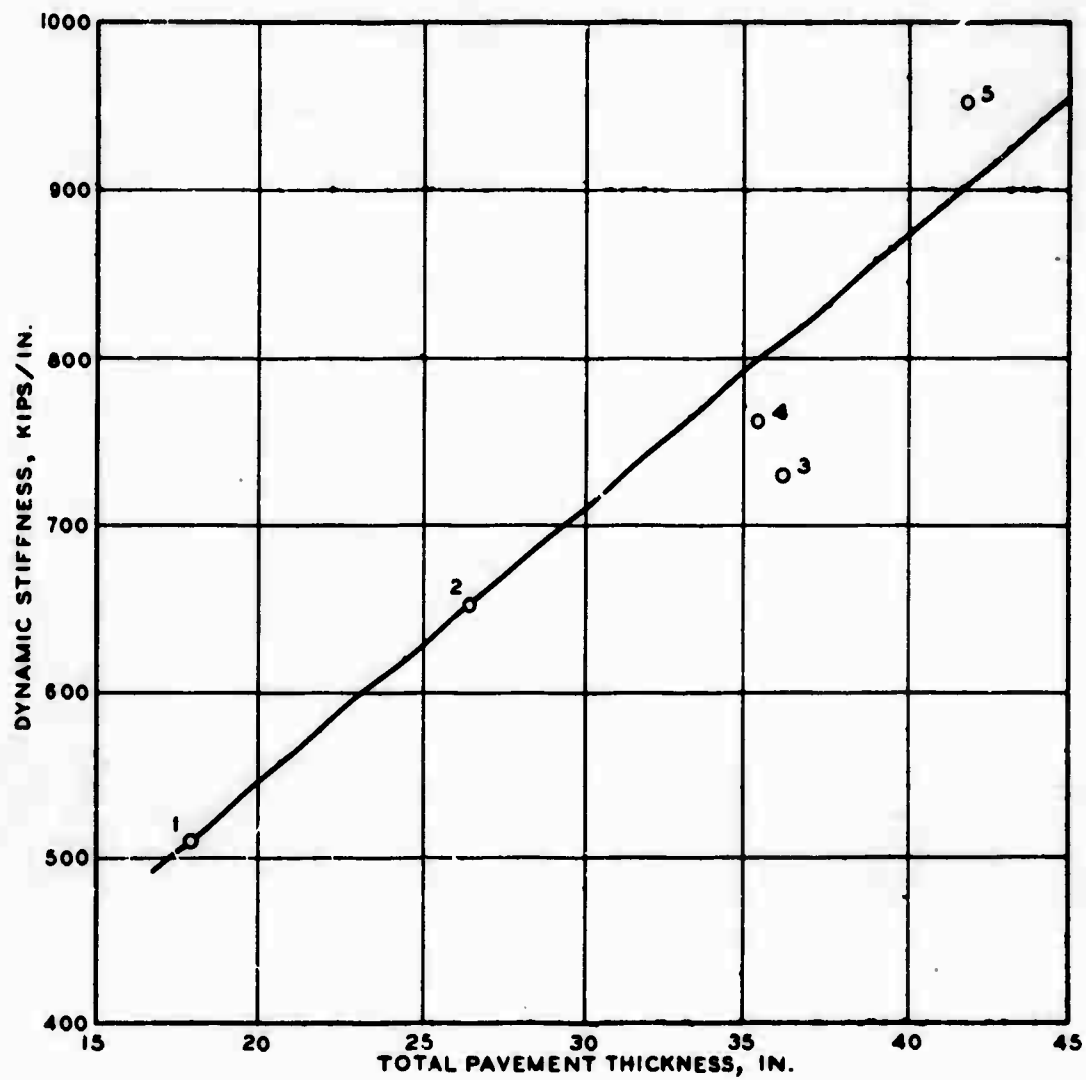
Figure 139. Temperature Effects on Deflection Versus Load for Flexible Pavement, Lane 1, Item 4



LEGEND

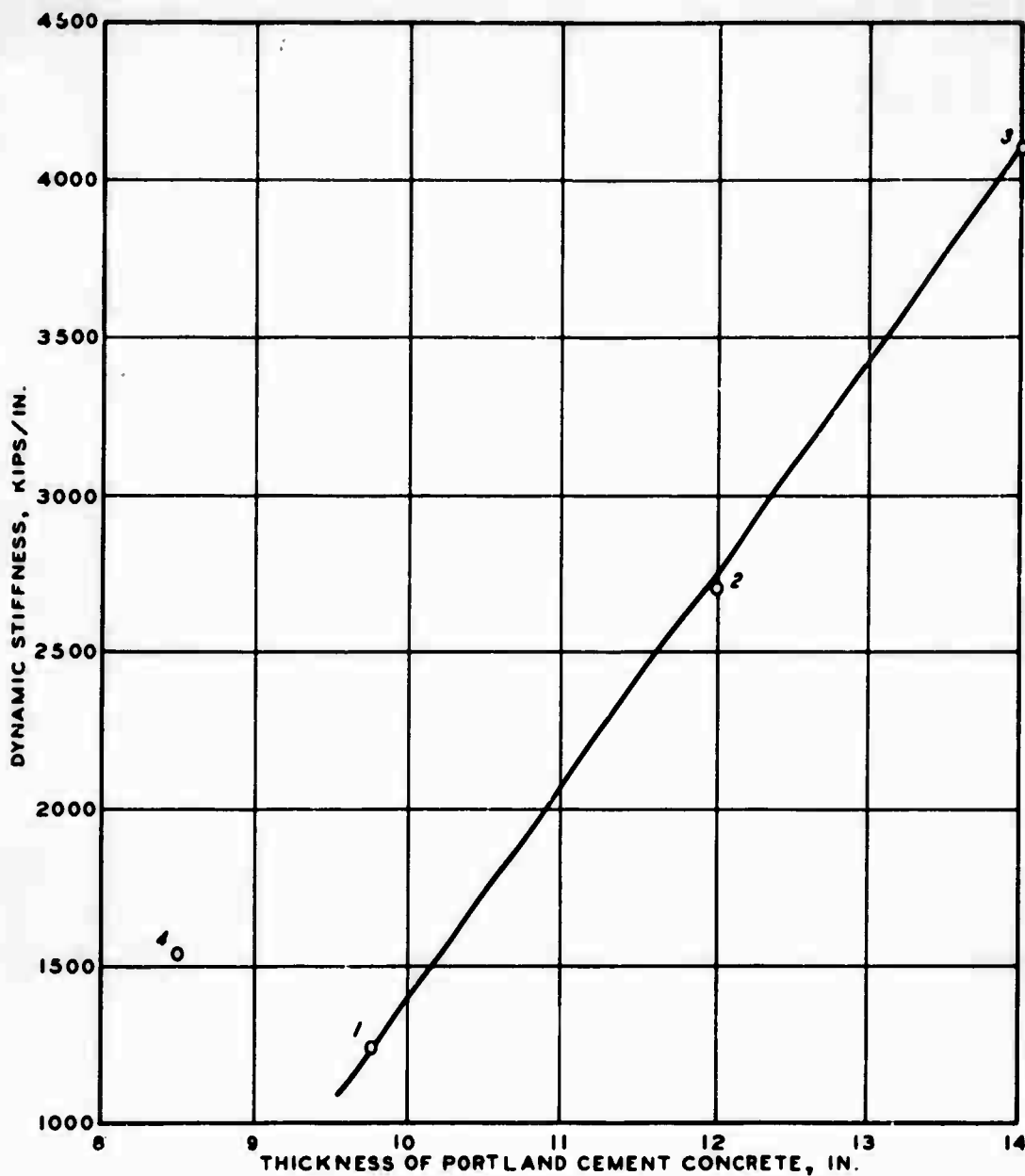
ECCENTRIC SETTING, DEG	
○	0
□	2
△	5
▽	10

Figure 140. Effect of Vibratory Load on Deflection Versus Load for North Edge of Flexible Pavement, Item 2



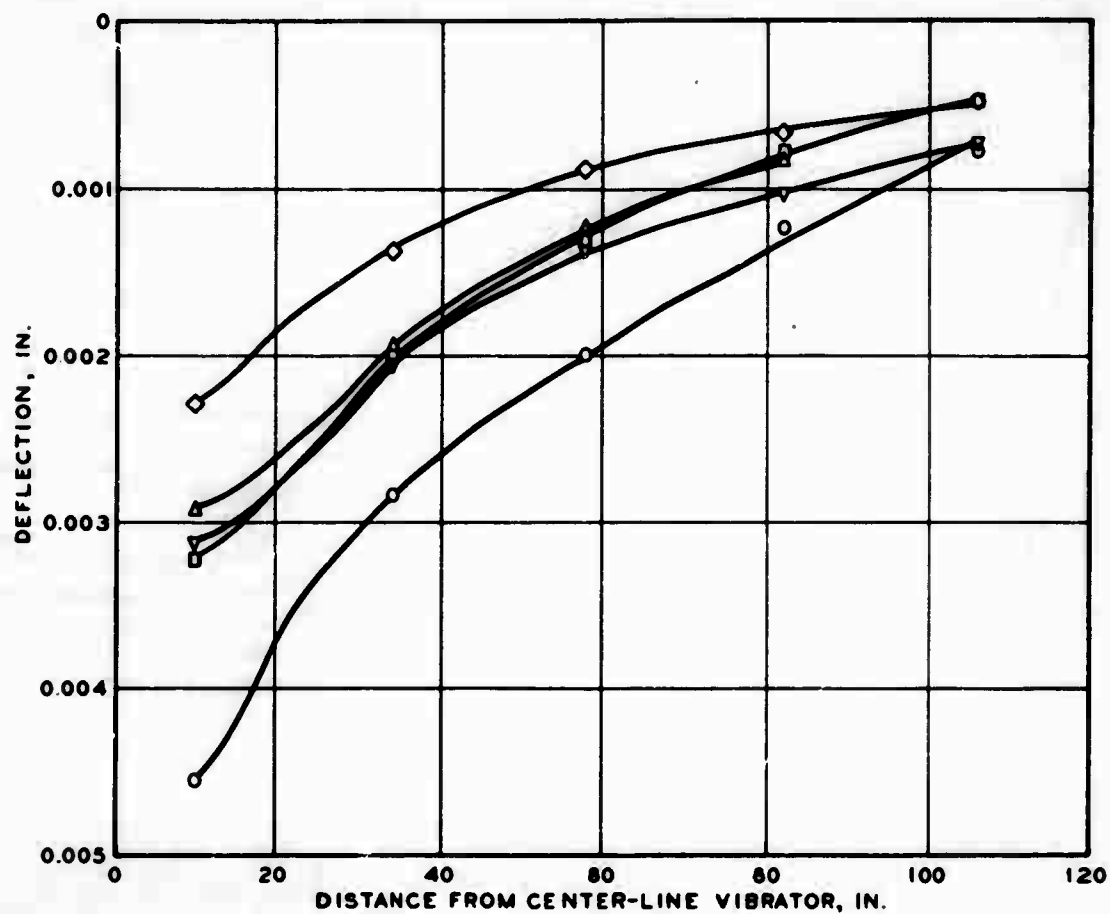
NOTE: NUMBERS BESIDE SYMBOLS
ARE ITEM NUMBERS.

Figure 141. Dynamic Stiffness Versus Total Pavement Thickness
for Flexible Pavement, Lane 1



NOTE: NUMBERS BESIDE SYMBOLS
ARE ITEM NUMBERS.

Figure 142. Dynamic Stiffness Versus Pavement Thickness for
Rigid Pavement, South Lane



LEGEND

	ITEM	ECC DEG	FREQ Hz	FORCE LB
O	1	10	9	1994
□	2	10	9	1903
Δ	3	10	9	1883
▽	4	10	9	1877
◇	5	10	9	1847

Figure 143. Vibratory Deflection Basin, Flexible Pavement Lane 1

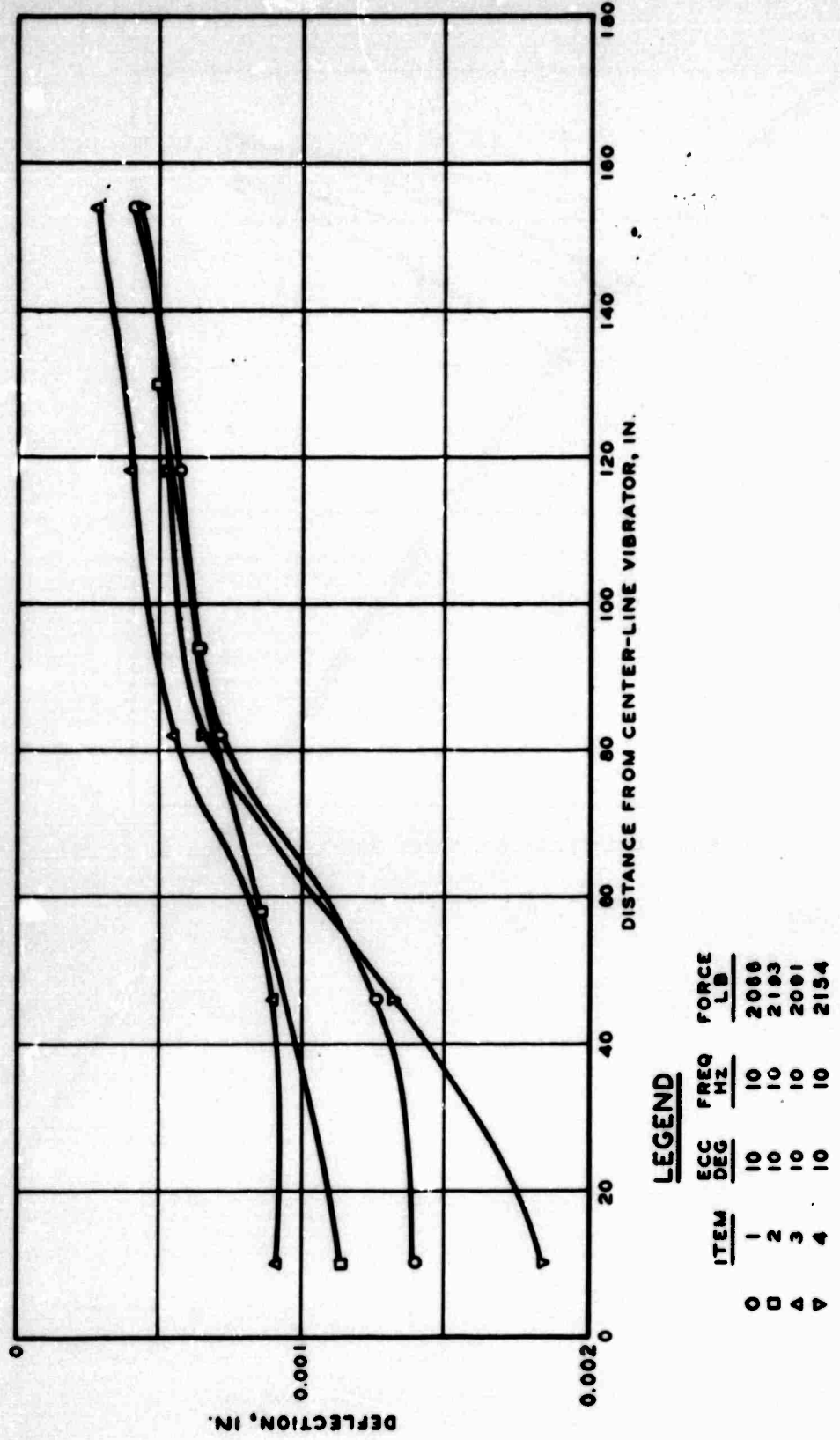


Figure 144. Vibratory Deflection Basin, Rigid Pavement South Lane

APPENDIX A: FLEXIBLE PAVEMENT INSTRUMENTATION MEASUREMENTS

SECTION I

INTRODUCTION

This appendix presents a listing of a portion of the static and the dynamic (slowly moving) load instrumentation data collected under the various loadings and wheel assemblies of the multiple-wheel heavy gear load (MWHGL) tests in items 3 and 4 of the flexible pavement test section. These data were reduced from the original records in order to select the values of maximum response to be used in the analysis of the behavior of the test section. Stresses and deflections under static and dynamic loads are presented in their initial reduced form with no corrections applied. For the case of static load stress and deflection measurements, selected data were further reduced and analyzed and are presented in the main text of this report. The values of stress and deflection under dynamic loads shown in tabular form in this appendix are the values used in the analysis of data as shown in the main text. This appendix discusses the reduction and the consistency of the data and the loss of instrumentation.

Listings of pore pressure data, temperature data, and pavement strain data are not presented in tabular form; however, the consistency of these data is discussed in this appendix and under analysis in the main text. These data are not presented because no significant pore pressures developed, the temperature effects on measured stresses and deflections were inconclusive, and the pavement strain data were considered to be unreliable.

1. NUMBER AND TYPE OF MEASUREMENTS

Table A-1 gives the approximate number of static readings taken for each load and wheel configuration tested. The total number of static load readings, including the static load tests run during traffic tests, was approximately 50,000 readings for both items. Many times this quantity exists on oscillographic recordings of the dynamic load tests run with each load and wheel configuration. These 50,000 static readings represent only raw data, that is, data in units of volts and microinches per inch. In the reduction of data, which will be discussed in the next section, each of the 50,000 readings

Table A-1

MWHGL Static and Dynamic Instrumentation Loadings of
Flexible Pavement Test Section

Test Loading No.	Loading	Date Collection of Readings Completed	Static Loading Grid Pattern	Number of Static Readings
1	Preliminary tests	25 Apr 69	*	2,660
2	15 kips, 12 wheels, 45 psi	30 Apr 69	Partial	5,320
3	15 kips, SWL, 45 psi	6 June 69	Partial	2,660
4	30 kips, 12 wheels, 100 psi	19 June 69	Complete	5,360
5	30 kips, SWL, 100 psi	26 June 69	Complete	4,280
6	30 kips, 6 wheels, 100 psi	2 July 69	Partial	5,320
7	Prime mover (12 wheels)	9 July 69	*	1,660
8	30 kips, twin tandem, 100 psi	15 July 69	Complete	8,640
9	30 kips, twin tandem, 150 psi	18 July 69	Partial	2,760
10	Prime mover (twin tandem)	23 July 69	*	1,660
10a	30 kips, SWL, 100 psi (speed test)		--	
11**	6 kips, SWL, 10 psi	25 July 69	Partial	2,660
11a	30 kips, 12 wheel, 100 psi		*	
12	50 kips, SWL, 165 psi	30 Oct 69	Partial	2,660
13	60 kips, twin tandem, 225 psi	6 Nov 69	Partial	2,760
			Total	48,400

Note: Test loading Nos. 1-10 represent both static and dynamic load tests.

Test No. 10a represents only dynamic loading, and test Nos. 11-13 represent only static loadings.

* Selected locations.

** Performed in conjunction with another project.

was converted to units of displacement or pressure; and for each reading, two values of change were calculated. This means approximately 100,000 values of usable static load data are a matter of record. The raw data and also the reduced data contain, in addition to the load readings, no-load readings taken before, after, and between tests. Also collected were support data of pavement temperatures, air temperatures, and barometric pressure. The data consist of the following five basic types:

- a. Soil and pore pressure data.
- b. Barometric pressure readings. Continuous recordings were made but were only read simultaneous with and for the correction of pore pressure readings.
- c. Deflection data that included reference rod readings.
- d. Asphalt pavement strain data.
- e. Temperature readings - ambient, pavement surface, and pavement/base interface

A rough approximation of the percentage of each of the basic types of data is shown in table A-2.

Table A-2

Basic Data Types for Static Loadings

<u>Type of Data</u>	<u>Approximate Percentage of Total Amount</u>	<u>Number of Values</u>
Soil and pore pressure	48.9	49,000
Barometric pressure	0.2*	200
Deflection	41.9	42,000
Pavement strain	8.0**	8,000
Temperature	1.0	1,000

* Additional data available from continuous recordings.

** These data are not usable, as will be explained later.

The same basic types of data exist on oscillograph records for the dynamic load tests, and the above percentages of each type apply also to the dynamic load test data; however, the total number of usable values is much greater.

2. PRESENTATION OF DATA

All of the static test measurements of deflections, stresses, and strains were reduced and tabulated; however, only the data for static loads of 30,000 and 60,000 lb per wheel are presented in this appendix due to the time factor as well as the space limitations considered reasonable. Because of time limitations, only a minimum of the dynamic test data has been taken from the oscillograph records, reduced, and tabulated; this includes deflection and soil pressure measurements for the 30,000-lb-per-wheel assembly load points on the four instrumented rows of items 3 and 4. This was considered to be the minimum information required for analysis. Table A-3 describes the static and dynamic load test conditions for the data presented in tables A-4 through A-21.

Table A-3
Description of Loading Conditions

<u>Assembly</u>	<u>Total Load kips</u>	<u>Tire Inflation Pressure, psi</u>	<u>Static Tests</u>	<u>Dynamic Tests</u>
Single wheel	30	100	x	x
Twin tandem	120	100	x	x
		150	x	--
	240	225	x	--
6 wheel	180	100	x	--
12 wheel	360	100	x	x

For static load data (tables A-4 through A-15), two values, total and rebound, were determined for vertical pressure and vertical deflection. The total values represent the difference between readings of the loaded condition and the initial no-load condition, whereas the rebound values represent the difference between readings of the loaded condition and the final, or after-load, no-load condition. Each table includes data for only one item (3 or 4), and in the top half of the table, all of the readings from soil pressure cells in that item are tabulated for both total and rebound values. The lower half of each table is a tabulation of the total and rebound values for all of the deflection gages in that item. On the left side of each table, three columns of information are given. This information is to be used in conjunction with figure A1 and figure A2 or A3, as appropriate.

Table A-4
Multiple-Wheel Heavy Gear Load Flexible Pavement Test, Static Instrumentation Loading Data
Item 3; Load Condition: 30 kips per wheel, Single Wheel, 100 psi

Vertical Pressure, Psi, at Indicated Cells																							
Row	Load Point	Loca- tion	Total										Rebound										
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	
1	1	A	0.28	0.23	0.37	0.32	0.34	1.02	0.12	0.18	0.00	0.76	-0.65	0.68	0.37	0.32	-1.20	0.81	0.00	0.44	8.32	-0.10	
		B	0.37	0.23	0.49	0.42	0.25	0.92	0.12	0.18	0.00	0.76	-0.56	0.68	0.49	0.42	-1.29	0.71	0.00	0.44	8.32	-0.10	
		C	0.74	0.45	0.61	0.53	0.08	0.82	0.24	0.16	0.00	0.86	-0.19	0.90	0.61	0.53	-1.46	0.61	0.12	0.44	8.32	0.00	
		D	1.29	0.68	0.73	0.53	0.08	0.72	0.24	0.26	0.00	0.95	0.36	1.13	0.73	0.53	-1.46	0.51	0.12	0.52	8.32	0.09	
		E	2.12	0.91	0.85	0.63	0.08	0.82	0.24	0.35	0.00	0.76	1.19	1.36	0.85	0.63	-1.46	0.61	0.12	0.61	8.32	-0.10	
		F	5.17	1.98	1.10	0.84	0.34	1.02	0.36	0.44	0.00	0.86	4.24	2.03	1.10	0.84	-1.20	0.81	0.24	0.70	8.32	0.00	
		G	7.75	2.03	1.22	0.84	0.77	1.02	0.60	0.61	0.00	0.95	6.82	2.48	1.22	0.84	-0.77	0.81	0.48	0.87	8.32	0.09	
		H	4.89	1.36	1.46	1.05	6.35	1.43	0.95	1.05	0.00	0.95	3.96	1.81	1.46	1.05	4.81	1.22	0.83	1.31	8.32	0.09	
		I	2.40	0.45	1.46	0.95	15.29	1.63	1.55	1.31	-0.18	0.95	1.47	0.90	1.46	0.95	13.75	1.42	1.45	1.57	8.14	0.09	
		J	1.48	-0.11	1.22	0.84	7.13	1.02	1.50	1.49	0.69	0.95	0.55	0.34	1.22	0.84	5.59	0.81	1.78	1.75	9.01	0.09	
		K	1.11	-0.45	0.97	0.63	2.40	0.41	1.55	1.22	54.42	0.76	0.18	0.00	0.97	0.63	0.86	0.20	1.43	1.48	62.74	-0.10	
		L	1.11	-0.45	0.73	0.42	1.89	0.41	1.31	1.05	-6.76	0.76	0.18	0.00	0.73	0.42	0.35	0.20	1.19	1.31	1.56	-0.10	
		M	0.93	-0.45	0.73	0.42	1.54	0.31	1.07	0.79	-8.49	0.86	0.00	0.00	0.73	0.42	0.00	0.10	0.95	1.05	-0.17	0.00	
		N	0.93	-0.45	0.49	0.21	1.28	0.41	0.71	0.35	-8.32	0.95	0.00	0.00	0.49	0.21	-0.26	0.20	0.59	0.61	0.00	0.09	

Vertical Deflection, in., at Indicated Gages																							
Row	Loca- tion	Total										Rebound											
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀			
1	1	A	0.002	0.001	-0.001	0.002	0.000	0.000	-0.003	0.000	0.000	0.007	0.002	0.002	0.000	0.000	-0.001	0.000	0.000	0.000	0.000		
		B	0.005	0.002	-0.001	0.002	0.000	0.000	-0.003	0.000	0.000	0.010	0.003	0.003	0.000	0.000	-0.001	0.000	0.000	0.000	0.000		
		C	0.010	0.002	0.000	0.002	0.001	0.000	-0.003	0.000	0.000	0.015	0.003	0.003	0.001	0.000	0.000	0.000	0.000	0.000	0.000		
		D	0.013	0.003	0.001	0.002	0.001	0.000	-0.002	0.000	0.000	0.018	0.004	0.004	0.002	0.000	0.000	0.000	0.001	0.000	0.000		
		E	0.015	0.003	0.001	0.002	0.001	0.000	-0.003	0.000	0.000	0.020	0.004	0.004	0.002	0.000	0.000	0.000	0.000	0.000	0.000		
		F	0.012	0.002	0.002	0.003	0.001	0.000	-0.002	0.000	0.000	0.017	0.003	0.003	0.003	0.001	0.000	0.000	0.001	0.000	0.000		
		G	0.007	0.002	0.002	0.003	0.001	0.000	-0.002	0.000	0.000	0.012	0.003	0.003	0.003	0.001	0.000	0.000	0.001	0.000	0.000		
		H	0.001	0.001	0.002	0.004	0.002	0.000	-0.002	0.000	0.000	0.006	0.002	0.002	0.003	0.002	0.001	0.000	0.001	0.000	0.000		
		I	-0.001	0.000	0.001	0.004	0.004	0.000	-0.003	0.000	0.001	0.004	0.001	0.001	0.002	0.002	0.003	0.000	0.000	0.000	0.001		
		J	-0.003	0.000	0.000	0.004	0.005	0.000	-0.003	0.000	0.001	0.002	0.002	0.001	0.001	0.002	0.004	0.000	0.000	0.000	0.001		
		K	-0.004	-0.001	-0.001	0.003	0.005	0.000	-0.003	0.000	0.001	0.001	0.000	0.000	0.000	0.001	0.005	0.000	0.000	0.000	0.001		
		L	-0.004	-0.001	-0.001	0.003	0.006	0.000	-0.003	0.000	0.001	0.001	0.000	0.000	0.000	0.001	0.005	0.000	0.000	0.000	0.001		
		M	-0.004	-0.001	-0.001	0.003	0.005	0.000	-0.003	0.000	0.001	0.001	0.000	0.000	0.000	0.001	0.004	0.000	-0.000	0.000	0.001		
		N	-0.005	-0.001	-0.001	0.002	0.004	0.000	-0.004	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.003	0.000	-0.001	0.000	0.001		

(continued)

(1 of 11 sheets)

Table A-4 (Continued)

Row	Loca- tion	Vertical Pressure, psi, at Indicated Cells										Vertical Deflection, in., at Indicated Gages																								
		P ₁	P ₂	P ₃	P ₄	P ₅	Total	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	Rebound	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	Rebound	P ₆	P ₇	P ₈	P ₉	P ₁₀		
2	1	E	1.39	0.73	-0.09	0.74	0.17	1.24	0.64	0.10	0.35	0.75	1.75	0.49	0.77	0.24	0.24	-0.17	1.01	0.53	0.41	0.17	-0.19													
		G	5.07	1.22	0.52	0.48	0.17	4.29	1.06	0.31	0.30	0.66	5.43	0.98	1.38	0.48	0.48	-0.17	4.06	0.95	0.62	0.70	-0.28													
		H	2.95	1.46	2.92	0.83	0.34	3.05	1.16	1.02	1.40	0.75	3.31	1.22	3.78	0.83	0.83	0.00	2.82	1.05	1.33	1.22	-0.19													
		I	0.93	1.46	7.82	1.31	0.17	1.36	1.15	1.73	1.92	0.57	2.29	1.22	8.68	1.31	1.31	-0.17	1.13	1.05	2.04	1.74	-0.37													
		J	0.10	1.22	3.09	1.66	0.34	0.68	0.95	0.31	2.10	0.57	0.46	0.98	3.95	1.66	1.66	0.00	0.45	0.64	0.62	1.92	-0.37													
		K	-0.09	0.97	0.00	1.43	0.65	0.45	0.53	-0.10	1.84	0.38	0.27	0.73	0.86	1.43	1.43	0.35	0.22	0.42	0.21	1.46	-0.56													
		Total										Rebound																								
2	1	E	0.036	0.004	0.002	0.001	0.001	0.000	0.000	0.000	-0.001	0.000	0.025	0.004	0.002	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000													
		G	0.024	0.003	0.005	0.002	0.001	0.000	0.001	0.001	0.000	0.000	0.013	0.003	0.005	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000													
		H	0.018	0.002	0.006	0.002	0.002	0.000	0.001	0.001	0.000	0.000	0.007	0.002	0.006	0.002	0.002	0.002	0.002	0.001	0.000	0.001	0.001													
		I	0.015	0.001	0.002	0.002	0.004	0.000	0.001	0.001	0.000	0.000	0.004	0.001	0.002	0.002	0.002	0.004	0.001	0.001	0.000	0.001	0.001													
		J	0.013	0.000	0.001	0.002	0.002	0.006	0.001	0.000	0.000	0.001	0.002	0.000	0.001	0.001	0.002	0.002	0.002	0.000	0.000	0.000	0.000													
		K	0.012	0.000	0.001	0.002	0.002	0.006	0.001	0.000	0.000	0.001	0.002	0.000	0.001	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.000													

(Continued)

(2 of 11 sheets)

Table A-4 (continued)

Row	Load Location	Vertical Pressure, psi, at Indicated Cells																				
		Total					Rebound															
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀											
3	1	E	1.38	0.61	0.09	0.24	0.52	1.46	0.63	0.00	0.43	-0.37	1.85	0.61	0.60	0.24	-0.18	1.01	0.53	-1.02	0.26	0.38
		G	3.59	0.98	0.43	0.48	0.52	5.75	4.05	0.21	0.87	-0.37	4.06	0.98	0.94	0.48	-0.18	5.30	0.95	-0.81	0.70	0.38
		H	2.21	1.22	1.38	0.71	0.52	4.29	1.16	1.84	1.39	-0.47	2.60	1.22	1.89	0.71	-0.18	3.84	1.06	0.82	1.22	0.28
		I	0.64	1.22	3.44	1.19	0.52	2.24	1.16	4.08	1.92	-0.47	1.11	1.22	3.95	1.19	-0.18	1.69	1.00	3.06	1.75	0.28
		J	0.09	0.98	1.46	1.43	0.52	1.13	0.95	2.04	2.27	-0.73	0.56	0.98	1.97	1.43	-0.18	0.68	0.85	1.02	2.10	0.00
		K	-0.28	0.73	0.00	1.19	0.35	0.67	0.74	1.23	1.92	-0.75	0.19	0.72	0.51	1.19	-6.35	0.22	0.64	0.21	1.75	0.00

Row	Load Location	Vertical Deflection, in., at Indicated Gages									
		D ₁	D ₂	D ₃	D ₄	Total	D ₅	D ₆	D ₇	D ₈	D ₉
3	1	E	0.033	0.005	0.003	0.001	0.001	0.001	0.000	0.000	0.000
		G	0.017	0.003	0.007	0.002	0.002	0.001	0.001	0.000	0.001
		H	0.009	0.002	0.005	0.003	0.003	0.001	0.001	0.000	0.001
		I	0.006	0.001	0.003	0.003	0.005	0.000	0.000	0.001	0.001
		J	0.003	0.000	0.001	0.003	0.009	0.000	0.000	0.001	0.002
		K	0.003	0.000	0.000	0.002	0.013	0.000	0.000	0.000	0.002

Row	Load Location	Rebound									
		R ₁	R ₂	R ₃	R ₄	Total	R ₅	R ₆	R ₇	R ₈	R ₉
3	1	E	0.019	0.005	0.004	0.001	-0.001	0.001	0.001	0.000	0.000
		G	0.003	0.003	0.008	0.002	0.000	0.001	0.002	0.000	0.001
		H	-0.005	0.002	0.006	0.003	0.001	0.001	0.002	0.000	0.001
		I	-0.008	0.001	0.004	0.003	0.003	0.000	0.001	0.001	0.001
		J	-0.011	0.000	0.002	0.003	0.007	0.000	0.001	0.002	0.002
		K	-0.011	0.000	0.001	0.002	0.011	0.000	0.001	0.000	0.002

(Continued)

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Table A-4(Continued)

Loc- ation	Load Point	Vertical Pressure, psi, at Indicated Cells										Rebound									
		Total					P					P					P				
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
1	E	1.11	0.49	0.17	0.24	0.34	1.80	0.74	-0.20	0.35	-0.19	1.66	0.61	0.52	0.24	0.00	0.56	0.64	-3.05	0.17	-0.38
	G	2.03	0.98	0.34	0.48	0.34	8.24	1.05	0.00	0.87	0.00	2.58	1.10	0.69	0.48	0.00	7.00	0.95	-2.85	0.69	-0.19
	H	1.20	0.98	0.51	0.59	0.34	6.43	1.27	2.55	1.40	0.10	1.75	1.10	0.86	0.59	0.00	5.19	1.17	-0.30	1.22	-0.09
	I	0.19	0.98	0.68	0.83	0.34	3.16	1.27	7.74	2.10	0.00	0.74	1.10	1.03	0.53	0.00	1.92	1.17	4.89	1.92	-0.19
	J	-0.18	0.73	0.25	0.95	0.17	1.91	1.05	4.18	2.45	0.19	0.37	0.85	0.60	0.95	-0.17	0.67	0.95	1.33	2.27	0.00
	K	-0.36	0.49	-0.18	0.83	0.17	1.46	0.84	2.85	2.10	9.00	0.19	0.61	0.17	0.83	-0.17	0.22	0.74	0.00	1.92	8.81

Loc- ation	Load Point	Vertical Deflection, in., at Indicated Gages										Rebound									
		Total					D					D					D				
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	
1	E	0.046	0.007	0.005	0.001	0.002	0.002	0.001	0.000	0.000		0.049	0.007	0.006	0.001	0.000	0.002	0.001	0.000	0.000	
	G	0.016	0.005	0.010	0.003	0.003	0.001	0.002	0.000	0.000		0.019	0.005	0.011	0.003	0.001	0.001	0.002	0.000	0.000	
	H	0.007	0.003	0.008	0.004	0.004	0.001	0.002	0.001	0.001		0.010	0.003	0.009	0.004	0.002	0.001	0.002	0.001	0.001	
	I	0.002	0.002	0.005	0.004	0.008	0.000	0.001	0.001	0.002		0.005	0.002	0.006	0.004	0.006	0.000	0.001	0.001	0.002	
	J	0.000	0.001	0.002	0.004	0.012	0.000	0.001	0.001	0.003		0.003	0.001	0.003	0.004	0.010	0.000	0.001	0.001	0.003	
	K	-0.001	0.001	0.001	0.003	0.017	0.000	0.000	0.001	0.003		0.002	0.001	0.002	0.003	0.015	0.000	0.000	0.001	0.003	

(Continued)

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Table A-4(Continued)

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells										Rebound										
			Total																				
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	
5	1	A	0.19	0.25	0.26	0.00	-0.86	0.11	0.32	0.21	0.17	0.09	0.37	0.37	0.26	0.24	-1.21	-0.23	0.32	-1.42	0.17	-1.42	-1.42
		B	0.28	0.37	0.26	0.00	0.35	0.11	0.32	0.21	0.35	0.00	0.46	0.49	0.26	0.24	0.00	-0.23	0.32	-1.42	0.35	-1.50	
		C	0.46	0.37	0.17	0.12	0.35	0.45	0.53	0.00	0.35	0.00	0.64	0.49	0.17	0.36	0.00	0.11	0.53	-1.63	0.35	-1.50	
		D	0.55	0.49	0.17	0.12	0.35	0.67	0.64	0.00	0.35	0.00	0.73	0.61	0.17	0.36	0.00	0.33	0.64	-1.63	0.35	-1.50	
		E	0.92	0.61	0.17	0.12	0.35	1.58	0.74	-0.10	0.35	0.00	1.10	0.73	0.17	0.36	0.00	1.24	0.74	-1.73	0.35	-1.50	
		F	1.29	0.73	0.17	0.24	0.35	4.51	0.95	-0.10	0.52	0.09	1.47	0.85	0.17	0.48	0.00	4.17	0.95	-1.73	0.52	-1.41	
		G	1.48	0.85	0.35	0.24	0.35	7.33	1.06	-0.20	0.87	0.09	1.66	0.97	0.35	0.48	0.00	6.99	1.06	-1.83	0.87	-1.41	
		H	0.92	0.98	0.52	0.48	0.35	5.19	1.17	2.45	1.57	0.09	1.10	1.10	0.52	0.72	0.00	4.85	1.17	0.82	1.57	-1.41	
		I	0.37	0.85	0.60	0.71	0.35	2.25	1.17	7.13	2.09	0.00	0.55	0.97	0.60	0.95	0.00	1.91	1.17	5.50	2.09	-1.50	
		J	0.00	0.85	0.35	0.71	0.35	1.13	0.95	3.47	2.44	0.47	0.18	0.97	0.35	0.95	0.00	0.79	0.95	1.84	2.44	-1.03	
		K	-0.09	0.61	0.17	0.71	0.35	0.67	0.74	1.43	1.92	31.40	0.09	0.73	0.17	0.95	0.00	0.33	0.74	-0.20	1.92	29.90	
		L	-0.18	0.37	0.17	0.48	0.35	0.45	0.64	1.23	1.66	11.06	0.00	0.49	0.17	0.72	0.00	0.11	0.64	-0.40	1.66	9.56	
		M	-0.18	0.37	0.00	0.48	0.35	0.45	0.53	1.02	1.22	2.06	0.00	0.49	0.00	0.72	0.00	0.11	0.53	-0.61	1.22	0.55	
		N	-0.18	0.25	0.00	0.24	0.35	0.34	0.32	1.02	0.69	1.69	0.00	0.37	0.00	0.48	0.00	0.00	0.32	-0.61	0.69	0.19	

Row	Load Location	Vertical Deflection, in., at Indicated Gages										Rebound									
		Total																			
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	
5	1	A	0.005	0.004	0.002	0.001	0.000	0.001	0.000	0.000		-0.065	0.003	0.002	0.000	0.002	0.001	0.000	0.000	0.000	
		B	0.011	0.007	0.002	0.001	0.001	0.002	0.000	0.000		-0.059	0.006	0.002	0.000	0.003	0.002	0.000	0.000	0.000	
		C	0.030	0.010	0.004	0.001	0.002	0.002	0.001	0.000		-0.040	0.009	0.004	0.000	0.004	0.002	0.001	0.000	0.000	
		D	0.107	0.011	0.005	0.001	0.011	0.003	0.001	0.000		0.037	0.010	0.005	0.000	0.013	0.003	0.001	0.000	0.000	
		E	0.161	0.011	0.008	0.002	0.002	0.003	0.002	0.000		0.091	0.010	0.008	0.001	0.004	0.003	0.002	0.000	0.000	
		F	0.108	0.010	0.012	0.002	0.002	0.002	0.003	0.001		0.038	0.009	0.012	0.001	0.004	0.002	0.003	0.001	0.000	
		G	0.087	0.007	0.015	0.003	0.002	0.002	0.003	0.001		0.017	0.006	0.015	0.002	0.004	0.002	0.003	0.001	0.001	
		H	0.076	0.005	0.011	0.005	0.004	0.001	0.003	0.001		0.006	0.004	0.011	0.004	0.006	0.001	0.003	0.001	0.002	
		I	0.071	0.003	0.006	0.005	0.009	0.001	0.002	0.003		0.001	0.002	0.006	0.004	0.011	0.001	0.002	0.001	0.003	
		J	0.068	0.002	0.004	0.005	0.014	0.000	0.001	0.004		-0.002	0.001	0.004	0.004	0.016	0.000	0.001	0.001	0.004	
		K	0.67	0.001	0.002	0.004	0.017	0.000	0.001	0.005		-0.003	0.000	0.002	0.003	0.019	0.000	0.001	0.001	0.005	
		L	0.067	0.001	0.001	0.003	0.016	0.000	0.001	0.001		-0.003	0.000	0.001	0.002	0.015	0.000	0.001	0.001	0.005	
		M	0.066	0.001	0.001	0.003	0.013	0.000	0.001	0.005		-0.004	0.000	0.001	0.002	0.015	0.000	0.001	0.001	0.005	
		N	0.066	0.001	0.000	0.002	0.008	0.000	0.000	0.004		-0.004	0.000	0.000	0.001	0.010	0.000	0.000	0.000	0.004	

(Continued)

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Table A-4 (Continued)

Row	Loca- tion	Vertical Pressure, psi, at Indicated Cells										Vertical Deflection, in., at Indicated Gages																			
		Total					Rebound					Total					Rebound														
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	
6	1	E	0.37	0.25	0.00	0.00	0.00	0.63	-0.20	0.35	0.65	0.56	0.19	0.00	0.24	0.00	2.26	0.63	2.24	0.14	0.75										
		G	0.55	0.49	0.00	0.24	0.00	0.84	-0.20	0.69	0.56	0.74	0.73	0.00	0.48	0.00	4.06	0.84	2.24	0.78	0.66										
		H	0.37	0.49	0.00	0.24	0.00	0.95	-0.20	1.04	0.56	0.56	0.73	0.00	0.48	0.00	2.93	0.95	2.24	1.13	0.66										
		I	0.18	0.49	0.18	0.24	0.00	0.95	0.41	1.57	0.37	0.37	0.73	0.18	0.48	0.00	1.47	0.95	2.85	1.66	0.47										
		J	0.00	0.49	0.18	0.36	0.00	0.84	-0.81	1.33	-0.57	0.19	0.73	0.18	0.60	0.00	0.68	0.84	1.63	1.92	-0.67										
		K	0.00	0.25	0.18	0.24	0.00	0.63	-1.83	1.57	-1.22	0.19	0.49	0.18	0.48	0.00	0.45	0.63	0.61	1.66	-1.32										

(Continued)

(6 of 11 sheets)

Table A-4 (Continued)

Row	Load Point	Loca- tion	Vertical Pressure, psi, at Indicated Cells										Rebound									
			Total																			
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
7	1	B	0.00	0.24	0.00	0.12	0.00	0.23	0.21	0.30	0.26	0.00	0.00	0.24	0.00	0.12	0.00	0.79	0.32	0.50	0.52	0.75
		C	0.19	0.37	0.00	0.24	0.00	0.34	0.42	0.20	0.26	-0.28	0.19	0.37	0.00	0.24	0.00	0.90	0.53	0.40	0.52	0.47
		D	0.19	0.24	0.00	0.24	0.00	0.57	0.42	0.10	0.26	-0.38	0.19	0.24	0.00	0.24	0.00	1.13	0.53	0.30	0.52	0.37
		E	0.19	0.37	0.00	0.24	0.00	0.79	0.53	0.00	0.35	-0.47	0.19	0.37	0.00	0.24	0.00	1.35	0.64	0.20	0.61	0.28
		F	0.38	0.49	0.00	0.24	0.00	1.02	0.63	0.10	0.44	0.00	0.28	0.49	0.00	0.24	0.00	1.58	0.74	0.30	0.70	0.75
		G	0.19	0.49	0.00	0.24	0.00	1.13	0.74	0.00	0.61	-0.10	0.19	0.49	0.00	0.24	0.00	1.69	0.85	0.20	0.87	0.65
		H	0.19	0.49	0.00	0.24	0.00	0.57	0.74	0.30	0.78	0.00	0.19	0.49	0.00	0.24	0.00	1.13	0.65	0.50	1.04	0.75
		I	0.19	0.49	0.00	0.24	0.17	0.11	0.74	0.41	0.96	-0.19	0.19	0.49	0.00	0.24	0.18	0.67	0.85	0.61	1.22	0.56
		J	0.19	0.37	0.00	0.24	0.00	-0.22	0.63	0.20	1.05	-0.38	0.19	0.37	0.00	0.24	0.00	0.34	0.74	0.40	1.31	0.37
		K	0.00	0.24	0.09	0.36	0.17	-0.34	+0.42	-0.10	0.78	-0.56	0.00	0.24	0.09	0.36	0.18	0.22	+0.53	0.10	1.04	0.19
		L	0.00	0.24	0.09	0.24	0.17	-0.45	0.42	-0.20	0.61	-0.56	0.00	0.24	0.09	0.24	0.18	0.11	0.53	0.00	0.87	0.19
		M	0.00	0.24	0.00	0.24	0.00	-0.45	0.32	-0.31	0.44	-0.56	0.00	0.24	0.00	0.24	0.00	0.11	0.43	-0.11	0.70	0.19
		N	0.00	0.12	0.00	0.24	0.17	-0.56	0.21	-0.31	0.26	-0.56	0.00	0.12	0.00	0.24	0.18	0.00	0.32	-0.11	0.52	0.19

Vertical Deflection, in., at Indicated Gages

Row	Loca- tion	Total										Rebound									
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	
7	1	0.008	0.009	0.002	0.001	0.002	0.006	0.001	0.000	0.002		0.015	0.007	-0.003	0.000	-0.001	0.005	0.000	0.000	-0.001	-0.002
	B	0.010	0.015	0.004	0.001	0.003	0.009	0.003	0.000	0.003		0.017	0.013	-0.007	0.000	-0.060	0.008	0.002	-0.001	-0.001	
	C	0.011	0.018	0.006	0.002	0.003	0.010	0.004	0.001	0.003		0.018	0.016	-0.005	0.001	-0.060	0.009	0.003	0.000	-0.001	
	D	0.011	0.022	0.010	0.002	0.003	0.010	0.006	0.001	0.003		0.018	0.020	-0.001	0.001	-0.060	0.009	0.005	0.000	-0.001	
	E	0.008	0.019	0.009	0.003	0.002	0.009	0.011	0.002	0.003		0.015	0.017	0.018	0.002	-0.061	0.008	0.010	0.001	-0.001	
	F	0.004	0.013	0.009	0.004	0.003	0.007	0.015	0.003	0.006		0.011	0.011	0.018	0.003	-0.060	0.006	0.014	0.002	0.000	
	G	0.000	0.009	0.009	0.006	0.006	0.005	0.014	0.004	0.006		0.007	0.007	0.038	0.005	-0.057	0.004	0.013	0.003	0.002	
	H	-0.003	0.005	0.009	0.008	0.013	0.003	0.008	0.004	0.010		0.004	0.003	0.018	0.007	-0.050	0.002	0.007	0.003	0.006	
	I	-0.004	0.004	0.000	0.008	0.013	0.002	0.005	0.004	0.017		0.003	0.002	0.009	0.007	-0.020	0.001	0.004	0.003	0.013	
	J	-0.005	0.003	0.016	0.006	0.131	0.001	0.003	0.003	0.022		0.002	0.001	0.005	-0.005	0.068	0.000	0.002	0.002	0.018	
	K	-0.005	0.003	0.014	0.005	0.106	0.001	0.002	0.003	0.021		0.002	0.001	0.003	0.004	0.043	0.000	0.001	0.002	0.017	
	L	-0.005	0.003	0.013	0.004	0.068	0.001	0.002	0.003	0.019		0.002	0.001	0.002	0.003	0.025	0.000	0.001	0.002	0.015	
	M	-0.006	0.003	0.012	0.003	0.069	0.001	0.001	0.002	0.013		0.001	0.001	0.001	0.002	0.006	0.000	0.000	0.001	0.009	

(Continued)

Table A-4 (Continued)

Vertical Pressure, psi, at Indicated Cells																								
Row	Load Point	Location	Total										Rebound											
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀		
8	1	E	0.19	0.24	0.00	0.12	0.18	0.56	0.43	-0.11	0.26	0.19	0.19	0.24	0.00	0.12	0.00	0.56	0.53	0.10	0.44	0.19		
		C	0.19	0.24	0.09	0.24	0.18	0.79	0.64	-0.11	0.52	0.28	0.19	0.24	0.09	0.24	0.00	0.79	0.74	0.10	0.70	0.28		
		H	0.19	0.24	0.00	0.12	0.18	0.67	0.74	0.20	0.70	0.19	0.19	0.24	0.00	0.12	0.00	0.67	0.84	0.41	0.88	0.19		
		I	0.19	0.24	0.09	0.24	0.18	0.45	0.74	0.20	0.87	0.37	0.19	0.24	0.09	0.24	0.00	0.45	0.84	0.41	1.05	0.37		
		J	0.10	0.24	0.09	0.24	0.18	0.22	0.64	0.20	0.87	0.19	0.10	0.24	0.09	0.24	0.00	0.22	0.74	0.41	1.05	0.19		
		K	0.10	0.24	0.09	0.24	0.18	0.00	0.53	0.00	0.78	0.19	0.10	0.24	0.09	0.24	0.00	0.00	0.63	0.21	0.96	0.19		

Vertical Deflection, in., at Indicated Gages																								
Row	Load Point	Location	Total										Rebound											
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉				
8	1	E	0.006	0.016	0.008	0.002	-0.002	0.013	0.007	0.001	0.007	0.007	0.009	0.016	0.010	0.001	0.009	0.009	0.012	0.004	0.001	-0.001		
		G	0.002	0.008	0.037	0.004	-0.001	0.008	0.024	0.003	0.007	0.007	0.005	0.008	0.039	0.003	0.010	0.007	0.021	0.003	-0.001			
		H	0.000	0.005	0.027	0.006	0.002	0.005	0.021	0.004	0.010	0.010	0.003	0.005	0.029	0.005	0.005	0.013	0.004	0.018	0.004	0.002		
		I	-0.001	0.002	0.012	0.007	0.010	0.003	0.012	0.005	0.015	0.015	0.002	0.002	0.014	0.006	0.006	0.021	0.002	0.009	0.005	0.007		
		J	-0.002	0.001	0.006	0.007	0.023	0.002	0.008	0.005	0.023	0.023	0.001	0.001	0.001	0.006	0.006	0.034	0.001	0.005	0.005	0.015		
		K	-0.003	0.001	0.002	0.005	0.044	0.001	0.005	0.005	0.003	0.029	0.000	0.001	0.004	0.004	0.004	0.055	0.000	0.002	0.003	0.021		

(Continued)

(8 of 11 sheets)

Table A-4 (Continued)

Row	Load Location	Vertical Pressure, psi, at Indicated Cells									
		Total					Rebound				
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
9	1										
	E	0.19	0.12	0.00	0.12	0.00	0.22	0.42	0.21	0.35	0.19
	G	0.10	0.24	0.00	0.12	0.00	0.34	0.63	0.21	0.53	0.19
	H	0.19	0.24	0.00	0.12	0.00	0.22	0.63	0.21	0.70	0.00
	I	0.10	0.24	0.18	0.24	0.00	0.22	0.63	0.31	0.79	0.19
	J	0.10	0.12	0.09	0.24	0.17	0.00	0.53	0.31	0.88	0.09
	K	0.10	0.12	0.09	0.24	0.17	0.00	0.44	0.21	0.70	0.00

Row	Load Location	Vertical Deflection, in., at Indicated Gages									
		Total					Rebound				
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
9	1										
	E	0.004	0.011	0.006	0.001	0.006	0.017	0.008	0.002	0.001	0.004
	G	0.002	0.006	0.020	0.003	0.006	0.011	0.040	0.004	0.002	0.002
	H	0.001	0.003	0.015	0.005	0.008	0.007	0.033	0.005	0.004	0.004
	I	0.000	0.001	0.006	0.005	0.014	0.005	0.020	0.006	0.011	0.001
	J	-0.001	0.000	0.001	0.005	0.021	0.004	0.014	0.006	0.022	0.001
	K	-0.001	-0.001	-0.002	0.004	0.022	0.003	0.011	0.005	0.033	0.001

(Continued)

(9 of 11 sheets)

Table A-4 (Continued)

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells									
			Total					Rebound				
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
10	1	E	0.09	0.12	0.09	0.00	0.17	0.22	0.42	-0.10	0.18	0.00
		G	0.09	0.24	0.00	0.12	0.17	0.34	0.42	0.11	0.35	0.00
		H	0.09	0.24	0.09	0.12	0.17	0.22	0.42	0.11	0.44	0.00
		I	0.09	0.12	0.09	0.12	0.17	0.22	0.42	0.11	0.53	0.00
		J	0.09	0.12	0.09	0.12	0.17	0.11	0.42	0.31	0.61	0.00
		K	0.09	0.12	0.09	0.12	0.34	0.00	0.42	0.21	0.53	0.00

Row	Load Point	Location	Vertical Reflection, in., at Indicated Gages									
			Total					Rebound				
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	
10	1	E	0.004	0.008	0.004	0.001	0.001	0.020	0.008	0.001	0.000	
		G	0.003	0.004	0.011	0.002	0.001	0.011	0.051	0.023	0.001	
		H	0.002	0.002	0.008	0.004	0.004	0.007	0.042	0.006	0.004	
		I	0.001	0.000	0.003	0.004	0.008	0.005	0.024	0.007	0.012	
		J	0.000	0.000	0.000	0.004	0.013	0.004	0.017	0.007	0.032	
		K	0.000	-0.001	-0.002	0.003	0.014	0.003	0.013	0.005	0.001	

(Continued)

(10 of 11 sheets)

Table A-4 (Concluded)

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells									
			Total					Rebound				
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
11	1	B	0.09	0.12	0.00	0.00	0.17	0.00	0.21	0.00	0.18	0.00
		C	0.09	0.12	0.00	0.00	0.17	0.11	0.21	0.00	0.18	0.09
		D	0.09	0.12	0.00	0.00	0.17	0.11	0.21	0.00	0.18	0.00
		E	0.09	0.12	0.00	0.00	0.17	0.11	0.32	0.00	0.19	0.00
		F	0.09	0.12	0.00	0.00	0.17	0.22	0.32	0.00	0.18	0.09
		G	0.09	0.12	0.00	0.12	0.17	0.22	0.42	0.00	0.26	0.09
		H	0.09	0.12	0.00	0.12	0.17	0.22	0.42	0.00	0.35	0.19
		I	0.09	0.12	0.00	0.12	0.17	0.11	0.42	0.00	0.35	0.19
		J	0.09	0.12	0.00	0.12	0.17	0.11	0.32	0.00	0.35	0.19
		K	0.09	0.12	0.00	0.12	0.17	0.09	0.21	0.00	0.35	0.19
		L	0.09	0.12	0.09	0.12	0.17	0.00	0.21	0.00	0.35	0.09
		M	0.09	0.12	0.09	0.12	0.17	0.00	0.21	0.00	0.35	0.19
		N	0.00	0.12	0.09	0.00	0.17	0.00	0.10	0.00	0.18	0.09

Vertical Reflection, in., at Indicated Gages

Row	Load Point	Location	Total									
			Total					Rebound				
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
11	1	B	0.002	-0.004	0.001	0.001	0.000	0.008	0.000	0.001	-0.001	0.000
		C	0.002	0.005	0.002	0.001	0.000	0.015	0.002	0.001	0.000	0.000
		D	0.002	0.006	0.002	0.001	0.000	0.019	0.004	0.001	0.000	0.000
		E	0.003	0.006	0.004	0.001	0.000	0.021	0.007	0.002	0.000	0.000
		F	0.002	0.005	0.006	0.002	0.000	0.018	0.023	0.002	-0.001	0.000
		G	0.002	0.003	0.008	0.003	0.001	0.012	0.049	0.004	0.000	0.000
		H	0.001	0.002	0.006	0.004	0.002	0.008	0.040	0.006	0.003	0.000
		I	0.001	0.000	0.003	0.004	0.005	0.005	0.022	0.007	0.012	0.000
		J	0.001	0.000	0.001	0.004	0.008	0.004	0.013	0.007	0.006	0.000
		K	0.001	-0.001	-0.001	0.003	0.009	0.004	0.009	0.005	0.127	0.000
		L	0.001	-0.001	-0.001	0.002	0.008	0.003	0.007	0.004	0.114	0.000
		M	0.000	-0.001	-0.001	0.002	0.006	-0.016	0.025	0.004	0.069	0.000
		N	0.000	-0.001	-0.002	0.001	0.002	0.003	0.005	0.003	0.077	0.000

Table A-5
Multiple-3 Heavy Gear Load Flexible Pavement Test, Static Instrumentation Loading Data
Item 4; Load Condition: 30 kips per wheel, Single wheel, 100 psi

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells										Rebound									
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
1	1	A	0.00	0.57	0.22	0.36	0.39	0.00	0.45	0.40	0.34	0.31	1.00	0.38	-3.05	0.24	-0.78	0.00	0.91	0.10	0.43	0.51
		B	0.00	0.95	0.22	0.36	0.29	0.18	0.68	0.30	0.34	0.21	1.00	0.76	-3.05	0.24	-0.88	0.18	1.14	0.00	0.43	0.41
		C	0.00	1.52	0.44	0.60	0.19	0.00	1.14	0.10	0.51	0.21	1.00	1.33	-2.83	0.48	-0.98	0.00	1.60	-0.20	0.60	0.41
		D	26.72	1.71	0.76	0.72	0.9	-0.18	1.37	0.50	0.60	0.21	29.72	1.52	-2.51	0.60	-0.88	-0.18	1.83	-0.30	0.69	0.41
		E	30.53	2.19	1.42	0.84	0.39	0.00	1.60	0.50	0.68	0.21	31.53	2.00	-1.85	0.72	-0.78	0.00	2.06	0.20	0.77	0.41
		F	-0.80	2.67	9.70	1.07	0.68	0.00	1.60	0.50	0.86	0.21	0.20	2.48	6.43	0.95	-0.49	0.00	2.06	0.20	0.95	0.41
		G	-0.80	2.28	21.79	1.31	1.56	0.00	1.26	0.90	1.03	0.51	0.20	2.09	18.52	1.19	0.39	0.00	1.72	0.60	1.12	0.71
		H	-0.80	1.33	9.91	1.55	5.18	-0.18	0.68	0.40	1.12	0.82	0.20	1.14	6.64	1.43	4.01	-0.18	1.14	0.10	1.21	1.02
		I	-0.80	1.71	4.14	1.43	8.41	-0.18	0.23	0.10	1.03	1.03	0.20	1.52	0.87	1.31	7.24	-0.18	0.69	-0.20	1.12	1.23
		J	-0.80	0.47	3.05	1.19	5.67	-0.18	0.00	0.00	0.86	0.82	0.20	0.28	-0.22	1.07	4.50	-0.18	0.46	-0.30	0.95	1.02
		K	-0.80	0.38	2.83	0.84	2.93	-0.18	-0.23	0.00	0.60	0.31	0.20	0.19	-0.44	0.72	1.76	-0.18	0.23	-0.30	0.69	0.51
		L	-0.80	0.28	2.83	0.72	2.15	-0.18	-0.23	-0.10	0.51	0.21	0.20	0.09	-0.44	0.60	0.98	-0.18	0.23	-0.40	0.60	0.41
		M	-0.80	0.19	2.72	0.60	1.86	-0.18	-0.35	0.00	0.43	0.00	0.20	0.00	-0.55	0.48	0.69	-0.18	0.11	-0.30	0.52	0.20
		N	-0.80	0.19	2.72	0.36	1.46	-0.18	-0.35	0.00	0.25	-0.10	0.20	0.00	-0.55	0.24	0.29	-0.18	0.11	0.30	0.34	0.10

Row	Load Point	Location	Vertical Deflection, in., at Indicated Gages										Rebound									
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
1	1	A	NG	0.004	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.008	0.004	0.002	0.002	0.002	0.001	0.001	0.000	0.000	0.001
		B	NG	0.005	0.001	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.009	0.005	0.003	0.002	0.002	0.001	0.001	0.000	0.000	0.001
		C	NG	0.007	0.001	0.001	0.001	0.002	0.001	0.000	0.000	0.000	0.010	0.007	0.003	0.003	0.002	0.002	0.001	0.000	0.000	0.001
		D	NG	0.080	0.001	0.001	0.001	0.002	0.001	0.000	0.000	0.000	0.010	0.008	0.003	0.003	0.002	0.002	0.001	0.000	0.000	0.001
		E	NG	0.008	0.001	0.001	0.001	0.000	0.001	0.000	0.000	0.000	0.009	0.008	0.003	0.003	0.002	0.002	0.001	0.000	0.000	0.001
		F	NG	0.007	0.001	0.001	0.002	0.001	0.001	0.000	0.000	0.000	0.009	0.007	0.003	0.004	0.003	0.002	0.001	0.000	0.000	0.001
		G	NG	0.005	0.001	0.001	0.003	0.001	0.001	0.000	0.000	0.000	0.009	0.005	0.003	0.005	0.003	0.001	0.001	0.000	0.000	0.001
		H	NG	0.003	0.001	0.001	0.004	0.002	0.001	0.000	0.000	0.000	0.011	0.003	0.003	0.006	0.004	0.001	0.001	0.000	0.000	0.001
		I	NG	0.002	0.001	0.000	0.005	0.001	0.001	0.000	0.001	0.001	0.014	0.002	0.003	0.007	0.006	0.001	0.001	0.000	0.000	0.002
		J	NG	0.001	0.000	0.000	0.004	0.005	0.001	0.000	0.001	0.001	0.019	0.001	0.002	0.006	0.007	0.001	0.001	0.000	0.000	0.002
		K	NG	0.001	0.000	0.000	0.002	0.005	0.001	0.000	0.001	0.001	0.023	0.001	0.002	0.004	0.007	0.001	0.001	0.000	0.000	0.002
		L	NG	0.001	-0.001	0.002	0.002	0.005	0.000	0.000	0.001	0.001	0.022	0.001	0.001	0.004	0.007	0.000	0.000	0.000	0.000	0.002
		M	NG	0.000	-0.001	0.001	0.001	0.004	0.000	0.000	0.001	0.001	0.020	0.000	0.001	0.003	0.003	0.000	0.000	0.000	0.000	0.002
		N	NG	0.000	-0.001	0.000	0.000	0.003	0.000	0.000	0.001	0.001	0.014	0.000	0.001	0.002	0.002	0.000	0.000	0.000	0.000	0.002

(continued)

Note: NG - no good.

(1 of 11 sheets)

Table A-5(Continued)

Row	Load Point	Loca- tion	Vertical Pressure, psi, at Indicated Cells									
			Total					Rebound				
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
2	1	E	0.00	1.90	0.33	0.72	0.20	0.00	2.18	0.10	0.60	0.20
		F	0.00	2.29	2.94	0.95	0.59	0.36	2.52	-0.30	0.95	0.20
		G	0.00	1.81	8.50	1.19	1.37	0.36	2.06	0.40	1.12	0.61
		H	0.00	1.14	2.51	1.43	3.82	0.36	1.49	0.00	1.29	1.23
		I	0.00	0.57	-0.87	1.43	6.36	0.36	0.91	-0.70	1.29	2.05
		K	0.00	0.19	-1.85	0.72	1.57	0.36	0.46	-1.20	0.77	0.82

Row	Load Point	Loca- tion	Vertical Reflection, in., at Indicated Gages									
			Total					Rebound				
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
2	1	E	0.008	0.010	0.002	0.001	0.001	0.003	0.000	0.000	0.000	0.001
		F	0.008	0.008	0.003	0.003	0.002	0.002	0.000	0.000	0.000	0.001
		G	0.009	0.006	0.003	0.005	0.002	0.002	0.000	0.000	0.000	0.002
		H	0.011	0.003	0.003	0.007	0.004	0.001	0.000	0.000	0.000	0.002
		I	0.015	0.002	0.002	0.008	0.006	0.001	0.000	0.000	0.000	0.002
		K	0.027	0.000	0.001	0.005	0.009	0.000	0.000	0.000	0.000	0.003

(Continued)

(2 of 11 sheets)

Table A-5(Continued)

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells										Rebound									
			Total																			
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
3	1	E	0.00	1.71	0.76	0.72	0.30	0.18	2.52	0.00	0.68	0.20	0.00	1.71	1.74	3.72	0.98	0.18	2.17	-1.20	0.68	-0.21
		F	0.00	1.90	1.52	0.95	0.59	0.00	2.98	1.40	0.94	0.30	0.00	1.90	4.50	0.65	1.27	0.00	2.63	0.20	0.94	-0.11
		G	0.00	1.62	3.05	1.19	1.28	0.00	2.64	4.40	1.20	0.61	0.00	1.62	1.03	1.19	1.96	0.00	2.89	3.20	1.20	0.20
		H	0.00	0.95	0.98	1.31	2.64	0.00	1.72	3.10	1.37	1.94	0.00	0.95	1.06	1.31	3.38	0.00	1.37	1.90	1.37	1.53
		I	0.00	0.97	-0.55	1.19	3.82	0.00	1.03	1.60	1.37	3.69	0.00	0.97	0.43	1.19	4.50	0.00	0.68	0.40	1.37	3.28
		K	0.00	0.19	-1.20	0.72	0.69	0.00	0.52	1.10	0.86	1.64	0.00	0.19	-0.22	0.72	1.37	0.00	0.23	-0.10	0.86	1.23

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells										Rebound									
			Total																			
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
3	1	E	0.007	0.022	0.003	0.002	0.002	0.003	0.001	0.000	0.001		0.005	0.018	0.003	0.004	0.004	0.004	0.001	0.000	0.001	
		F	0.007	0.017	0.003	0.004	0.002	0.003	0.001	0.000	0.001		0.005	0.013	0.003	0.006	0.004	0.004	0.001	0.000	0.001	
		G	0.008	0.013	0.004	0.006	0.003	0.002	0.001	0.000	0.001		0.006	0.009	0.004	0.008	0.005	0.003	0.001	0.000	0.001	
		H	0.010	0.009	0.003	0.009	0.005	0.001	0.001	0.000	0.002		0.008	0.005	0.003	0.011	0.007	0.002	0.001	0.000	0.002	
		I	0.017	0.007	0.002	0.011	0.008	0.003	0.001	0.000	0.003		0.015	0.003	0.002	0.013	0.010	0.001	0.001	0.000	0.003	
		K	0.036	0.004	0.001	0.006	0.012	-0.001	0.001	0.000	0.003		0.340	0.000	0.001	0.008	0.014	0.000	0.001	0.000	0.003	

(Continued)

(3 of 11 sheets)

Table A-5(Continued)

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells									
			Total					Rebound				
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
A	1	F	0.00	1.33	0.65	0.72	0.39	37.88	2.64	0.10	0.78	0.20
		F	0.00	1.52	0.98	0.95	0.59	0.37	3.33	2.80	0.95	0.41
		G	0.00	1.14	1.09	1.07	1.07	0.37	2.87	8.31	1.29	0.71
		H	0.30	0.57	0.33	1.19	1.76	0.37	1.84	5.21	1.47	2.87
		I	0.00	0.38	-0.22	1.07	2.15	0.37	1.26	3.20	1.38	5.33
		K	0.00	0.00	-0.55	0.72	0.39	0.37	0.57	2.60	0.86	2.25
B	1	F	0.003	0.022	0.004	0.003	0.003	0.006	0.001	0.000	0.000	0.000
		F	0.003	0.017	0.005	0.005	0.003	0.005	0.002	0.000	0.002	0.002
		G	0.004	0.011	0.006	0.009	0.004	0.004	0.003	0.000	0.001	0.001
		H	0.007	0.006	0.005	0.014	0.007	0.003	0.001	0.000	0.002	0.002
		I	0.014	0.003	0.004	0.017	0.014	0.003	0.001	0.000	0.003	0.003
		K	0.014	0.000	0.002	0.009	0.017	0.003	0.001	0.000	0.000	0.000

Vertical Deflection, in., at Indicated Gages

Row	Load Point	Location	Vertical Deflection, in., at Indicated Gages									
			Total					Rebound				
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
A	1	F	0.003	0.022	0.004	0.003	0.003	0.006	0.001	0.000	0.000	0.000
		F	0.003	0.017	0.005	0.005	0.003	0.005	0.002	0.000	0.002	0.002
		G	0.004	0.011	0.006	0.009	0.004	0.004	0.003	0.000	0.001	0.001
		H	0.007	0.006	0.005	0.014	0.007	0.003	0.001	0.000	0.002	0.002
		I	0.014	0.003	0.004	0.017	0.014	0.003	0.001	0.000	0.003	0.003
		K	0.014	0.000	0.002	0.009	0.017	0.003	0.001	0.000	0.000	0.000

(Continued)

(4 of 11 sheets)

Table A-5 (Continued)

Row	Load Location	Vertical Pressure, psi, at Indicated Cells									
		Total					Rebound				
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
5	A	0.00	0.38	0.22	0.24	0.39	0.00	0.57	0.00	0.34	0.20
	B	0.00	0.66	0.22	0.36	0.39	0.00	0.91	0.00	0.34	0.20
	C	0.00	0.86	0.44	0.48	0.39	0.72	1.60	0.00	0.51	0.20
	D	0.00	1.05	0.44	0.48	0.39	0.62	2.06	0.30	0.60	0.20
	E	0.00	1.14	0.56	0.60	0.39	0.50	2.75	0.20	0.69	0.20
	F	0.00	1.14	0.77	0.72	0.59	0.72	3.21	0.30	0.71	0.20
	G	0.00	0.95	0.87	0.95	0.98	0.54	2.63	0.71	1.38	0.71
	H	0.00	0.57	0.44	0.36	0.37	0.54	1.60	0.54	1.03	0.54
	I	0.00	0.38	0.22	0.24	0.39	0.54	1.03	0.54	1.03	0.54
	J	0.00	0.19	-0.11	0.72	0.98	0.36	0.57	1.01	1.20	0.51
	K	0.00	0.00	-0.21	0.48	0.39	0.36	0.22	1.01	0.86	2.25
	L	0.00	0.00	-0.21	0.36	0.20	0.36	0.22	1.01	0.69	1.53
	M	0.00	0.00	-0.21	0.24	0.10	0.54	0.22	1.01	0.51	1.23
	N	0.00	0.00	-0.21	0.24	0.00	0.36	0.11	1.01	0.34	0.82

Row	Load Location	Vertical Deflection, in., at Indicated Gages									
		Total					Rebound				
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
5	A	0.001	0.008	0.001	0.003	0.001	0.004	0.000	0.000	0.001	0.001
	B	0.002	0.014	0.002	0.003	0.002	0.006	0.001	0.000	0.001	0.001
	C	0.002	0.022	0.003	0.003	0.003	0.008	0.001	0.000	0.001	0.001
	D	0.003	0.026	0.003	0.003	0.003	0.009	0.001	0.000	0.001	0.001
	E	0.003	0.027	0.004	0.004	0.003	0.009	0.001	0.000	0.001	0.001
	F	0.003	0.022	0.006	0.007	0.004	0.008	0.001	0.000	0.001	0.001
	G	0.003	0.014	0.007	0.011	0.005	0.006	0.001	0.000	0.001	0.001
	H	0.006	0.007	0.006	0.019	0.008	0.004	0.001	0.000	0.001	0.001
	I	0.014	0.002	0.005	0.024	0.014	0.002	0.001	0.000	0.001	0.001
	J	0.034	0.000	0.003	0.022	0.022	0.001	0.001	0.000	0.001	0.001
	K	0.186	-0.001	0.003	0.015	0.025	0.000	0.001	0.000	0.001	0.001
	L	0.177	-0.002	0.002	0.011	0.024	0.000	0.001	0.000	0.001	0.001
	M	0.159	-0.002	0.002	0.009	0.022	0.000	0.001	0.000	0.001	0.001
	N	0.130	-0.003	0.001	0.005	0.016	0.000	0.001	0.000	0.001	0.001

(Continued)

(5 of 11 sheets)

Table A-5(Continued)

Row	Load Point	Loca- tion	Vertical Pressure, psi, at Indicated Cells										Rebound									
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
6	1	E	0.00	0.67	0.33	0.48	0.10	-0.36	1.84	0.40	0.69	0.31	0.20	0.95	0.22	0.72	0.39	-0.18	2.18	2.61	0.69	1.03
		F	0.00	0.67	0.33	0.48	0.30	-0.18	2.41	0.80	0.86	0.41	0.20	0.95	0.22	0.72	0.59	0.00	2.75	3.01	0.86	1.13
		G	0.00	0.48	0.33	0.50	0.49	0.00	1.95	0.60	1.20	0.82	0.20	0.76	0.22	0.84	0.78	0.18	2.29	2.81	1.20	1.54
		H	0.00	0.29	0.33	1.43	0.49	0.00	1.49	-0.71	1.20	1.64	0.20	0.57	0.22	1.67	0.78	0.18	1.83	1.50	1.20	2.36
		I	-0.20	0.10	0.11	0.48	0.49	0.00	0.57	-1.41	1.20	2.77	0.00	0.38	0.00	0.72	0.78	0.18	0.91	0.80	1.20	3.49
		K	-0.20	-0.09	0.11	0.24	0.20	0.00	0.12	-1.71	0.69	0.72	0.00	0.19	0.00	0.48	0.49	0.18	0.46	0.50	0.69	1.44

Row	Load Point	Loca- tion	Vertical Deflection, in., at Indicated Gages										Rebound									
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
6	1	E	0.003	0.042	0.007	0.003	0.003	0.026	0.002	0.000	0.002	0.002	0.035	0.043	0.004	-0.006	-0.005	0.018	0.002	0.000	0.000	0.002
		F	0.001	0.050	0.010	0.007	0.004	0.021	0.003	0.000	0.002	0.002	0.032	0.031	0.007	-0.002	-0.004	0.130	0.003	0.000	0.000	0.002
		G	0.002	0.033	0.012	0.016	0.006	0.016	0.004	0.000	0.003	0.003	0.034	0.024	0.009	0.007	-0.002	0.008	0.004	0.000	0.000	0.003
		H	0.004	0.023	0.011	0.036	0.010	0.013	0.004	0.000	0.005	0.005	0.036	0.004	0.008	0.008	0.027	0.002	0.005	0.004	0.000	0.005
		I	0.010	0.016	0.009	0.059	0.021	0.009	0.004	0.000	0.009	0.009	0.042	-0.008	0.006	0.050	0.013	0.001	0.004	0.000	0.000	0.009
		K	0.018	0.011	0.005	0.031	0.045	0.007	0.002	0.000	0.012	0.012	0.050	-0.008	0.002	0.022	0.037	-0.001	0.002	0.000	0.000	0.012

(Continued)

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Table A-5 (Continued)

Rev	Loca- tion	Vertical Pressure, psi, at Indicated Cells									
		Total					Rebound				
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
7	1	0.00	0.29	0.11	0.24	0.10	0.18	0.80	0.10	0.34	0.20
	B	0.00	0.29	0.11	0.24	0.10	0.18	0.80	0.10	0.34	0.20
	C	0.00	0.29	0.11	0.24	0.10	0.18	0.80	0.10	0.34	0.20
	D	-0.20	0.38	0.11	0.24	0.20	0.00	1.26	0.30	0.43	0.20
	E	-0.20	0.38	0.11	0.36	0.20	0.00	1.26	0.40	0.51	0.20
	F	0.00	0.38	0.11	0.36	0.20	0.00	1.38	0.40	0.69	0.30
	G	0.00	0.29	0.22	0.48	0.29	0.00	1.03	0.20	0.86	0.51
	H	0.00	0.19	0.22	0.48	0.39	0.18	0.69	-0.10	0.86	0.71
	I	0.00	0.10	0.11	0.36	0.39	0.18	0.23	-0.10	0.77	0.82
	J	-0.20	0.00	-0.11	0.36	0.29	0.18	-0.11	-0.32	0.69	0.61
	K	-0.20	-0.09	-0.11	0.24	0.20	0.18	-0.11	-0.30	0.43	0.20
	L	0.00	-0.09	-0.11	0.24	0.20	0.18	-0.23	-0.30	0.34	0.10
	M	0.00	-0.09	-0.11	0.24	0.20	0.11	-0.23	-0.30	0.26	-0.11
	N	0.00	-0.09	-0.11	0.00	0.00	0.18	-0.34	0.30	0.02	-0.21

Vertical Reflection, in., at Indicated Gages

Rev	Loca- tion	Vertical Reflection, in., at Indicated Gages									
		Total					Rebound				
		b ₁	b ₂	b ₃	b ₄	b ₅	b ₆	b ₇	b ₈	b ₉	b ₁₀
7	1	0.000	0.019	0.000	0.003	0.002	0.019	0.001	0.000	0.002	0.002
	B	0.000	0.019	0.000	0.003	0.002	0.019	0.001	0.000	0.002	0.002
	C	0.001	0.054	0.004	0.003	0.003	0.030	0.002	0.000	0.003	0.003
	D	0.001	0.109	0.005	0.005	0.003	0.034	0.002	0.000	0.003	0.003
	E	0.001	0.147	0.007	0.005	0.003	0.037	0.003	0.000	0.003	0.003
	F	0.002	0.104	0.009	0.007	0.003	0.032	0.004	0.000	0.004	0.004
	G	0.002	0.080	0.012	0.017	0.005	0.023	0.005	0.000	0.005	0.005
	H	0.004	0.066	0.011	0.049	0.010	0.016	0.005	0.000	0.009	0.009
	I	0.008	0.058	0.009	0.048	0.020	0.011	0.005	0.000	0.015	0.015
	J	0.011	0.053	0.006	0.071	-0.044	0.008	0.004	0.000	0.022	0.022
	K	0.012	0.051	0.004	0.047	0.061	0.006	0.003	0.000	0.025	0.025
	L	0.011	0.050	0.004	0.039	0.060	0.005	0.002	0.000	0.026	0.026
	M	0.009	0.049	0.003	0.033	0.054	0.005	0.002	0.000	0.024	0.024
	N	0.003	0.049	0.003	0.026	0.038	0.005	0.001	0.000	0.018	0.018

(Continued)

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Table A-5(Continued)

Row	Loca- tion	Vertical Pressure, Psi, at Indicated Cells										Vertical Reflection, in., at Indicated Cells									
		Total										Rebound									
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
8	I	0.00	0.28	0.11	0.24	0.10	0.00	1.03	0.40	0.52	0.20	0.00	0.28	0.00	0.36	0.10	-0.37	1.26	0.60	0.61	0.41
	F	0.00	0.28	0.11	0.36	0.20	0.00	1.15	0.40	0.60	0.20	0.00	0.28	0.00	0.48	0.20	-0.37	1.38	0.60	0.69	0.41
	G	0.00	0.19	0.22	0.36	0.20	0.00	1.03	0.10	0.77	0.41	0.00	0.19	0.11	0.48	0.20	-0.37	1.26	0.30	0.86	0.62
	H	0.00	0.19	0.11	0.36	0.20	0.18	0.58	0.00	0.77	0.61	0.00	0.19	0.00	0.48	0.20	-0.19	0.81	0.20	0.86	0.62
	I	0.00	0.09	0.11	0.24	0.20	0.18	0.35	0.00	0.77	0.61	0.00	0.09	0.00	0.36	0.20	-0.19	0.58	0.20	0.86	0.82
	K	0.00	0.00	0.11	0.12	0.10	0.18	0.00	0.00	0.52	0.30	0.00	0.00	0.00	0.24	0.10	-0.19	0.23	0.20	0.61	0.51

Row	Loca- tion	Total										Rebound									
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
9	I	0.00	0.09	0.08	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	F	0.00	0.09	0.08	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	G	0.00	0.09	0.08	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	H	0.00	0.09	0.08	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	I	0.00	0.09	0.08	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	K	0.00	0.09	0.08	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

(Continued)

(8 of 11 sheets)

Table A-5 (Continued)

Row	Loca- tion	Vertical Pressure, psi, at indicated cells									
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
9	E	0.00	0.19	0.00	0.24	0.00	0.00	0.92	0.40	0.52	0.21
	F	0.00	0.19	0.00	0.24	0.00	-0.19	0.92	0.50	0.52	0.21
	G	0.00	0.19	0.00	0.24	0.10	0.00	0.81	0.30	0.61	0.31
	H	0.00	0.19	0.00	0.36	0.20	0.00	0.58	0.20	0.69	0.51
	I	0.00	0.00	0.00	0.24	0.20	0.00	0.35	0.20	0.69	0.62
	K	0.00	0.00	0.00	0.24	0.00	0.00	0.12	0.10	0.35	0.21
Vertical Reflection, in., at indicated gages											
Row	Loca- tion	Vertical Reflection, in., at indicated gages									
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
9	F	0.002	0.021	0.007	0.006	0.003	0.051	0.006	0.000	0.003	0.003
	G	0.002	0.009	0.008	0.012	0.005	0.034	0.007	0.000	0.005	0.005
	H	0.003	0.001	0.007	0.024	0.008	0.023	0.007	0.000	0.010	0.010
	I	0.006	-0.006	0.005	0.035	0.015	0.016	0.006	0.000	0.020	0.020
	K	0.008	-0.010	0.002	0.015	0.030	0.011	0.003	0.000	0.044	0.044

(Continued)

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Table A-5 (Continued)

Row	Loca- tion	Vertical Pressure, psi, at Indicated Cells										Rebound									
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
10	1	0.00	0.19	0.10	0.24	0.00	-0.37	0.69	0.20	0.34	0.10	0.00	0.19	-0.11	0.24	0.00	-0.37	0.69	0.30	0.13	0.10
	F	0.00	0.19	0.11	0.24	0.10	0.10	0.69	0.10	0.13	0.21	0.00	0.19	0.00	0.24	0.10	0.00	0.69	0.20	0.52	0.21
	T	0.00	0.19	0.11	0.24	0.10	0.10	0.69	-0.10	0.13	0.21	0.00	0.19	0.00	0.24	0.10	0.00	0.69	0.20	0.52	0.21
	H	0.00	0.09	0.11	0.24	0.10	0.00	0.45	-0.10	0.11	0.31	0.00	0.09	0.00	0.24	0.10	0.00	0.46	0.00	0.60	0.31
	I	0.00	0.09	0.11	0.24	0.20	0.00	0.23	-0.20	0.13	0.41	0.00	0.09	0.00	0.24	0.20	0.00	0.23	-0.10	0.52	0.41
	K	0.00	0.00	0.00	0.24	0.10	0.00	0.00	-0.20	0.26	0.21	0.00	0.00	-0.11	0.24	0.10	0.00	0.00	-0.10	0.35	0.21

Row	Loca- tion	Vertical Deflection, in., at Indicated Gages										Rebound									
		v ₁	v ₂	v ₃	v ₄	v ₅	v ₆	v ₇	v ₈	v ₉	v ₁₀	v ₁	v ₂	v ₃	v ₄	v ₅	v ₆	v ₇	v ₈	v ₉	v ₁₀
10	1	0.001	0.021	0.005	0.003	0.002	0.138	0.304	0.000	0.003	0.003	0.002	0.033	0.005	0.008	0.007	0.088	0.002	0.000	-0.006	-0.006
	F	0.007	0.016	0.006	0.006	0.002	0.099	0.036	0.000	0.004	0.004	0.002	0.028	0.006	0.011	0.007	0.049	0.004	0.000	-0.005	-0.005
	G	0.112	0.008	0.007	0.010	0.004	0.074	0.008	0.000	0.006	0.006	0.003	0.020	0.007	0.015	0.009	0.024	0.006	0.000	-0.001	-0.001
	H	0.003	0.001	0.006	0.018	0.007	0.130	0.008	0.000	0.011	0.011	0.004	0.013	0.006	0.023	0.012	0.010	0.006	0.000	0.000	0.000
	I	0.004	-0.004	0.005	0.023	0.012	0.052	0.004	0.000	0.021	0.021	0.005	0.008	0.005	0.028	0.017	0.002	0.004	0.000	0.012	0.012
	K	0.006	-0.007	0.002	0.011	0.000	0.047	0.004	0.000	0.051	0.051	0.007	0.005	0.002	0.016	0.025	-0.003	0.002	0.000	0.042	0.042

(Continued)

(10 of 11 sheets)

Table A-5 (Continued)

Row	Load Location	Vertical Deflection, in., at Indicated Cells									
		P_1	P_2	P_3	P_4	P_5	P_6	P_7	P_8	P_9	P_{10}
11	B	0.00	0.09	0.00	0.12	0.00	0.00	0.23	0.10	0.17	0.00
	C	0.00	0.09	0.00	0.12	0.00	0.00	0.34	0.10	0.17	0.00
	D	0.00	0.09	0.00	0.12	0.00	0.00	0.46	0.20	0.26	0.00
	E	0.00	0.19	0.00	0.24	0.00	0.19	0.46	0.10	0.35	0.10
	F	0.00	0.19	0.00	0.24	0.00	0.00	0.46	0.10	0.35	0.10
	G	0.00	0.19	0.00	0.24	0.10	0.00	0.46	0.10	0.35	0.21
	H	0.20	0.09	0.00	0.24	0.10	0.00	0.23	0.10	0.43	0.21
	I	0.00	0.00	0.00	0.24	0.10	0.18	0.11	-0.10	0.35	0.21
	J	0.00	0.00	0.00	0.24	0.10	0.00	0.00	-0.10	0.35	0.21
	K	0.00	0.00	-0.11	0.12	0.00	0.00	0.00	-0.10	0.26	0.10
	L	0.00	0.00	-0.11	0.12	0.10	0.00	-0.12	-0.10	0.17	0.10
	M	0.20	0.00	0.00	0.00	0.00	0.00	-0.12	-0.10	0.17	0.10
	N	0.00	0.00	0.00	0.00	0.00	0.19	-0.12	-0.10	0.00	0.00

Row	Load Location	Vertical Deflection, in., at Indicated Gages									
		b_1	b_2	b_3	b_4	b_5	b_6	b_7	b_8	b_9	b_{10}
11	B	0.000	0.011	0.001	0.002	0.001	0.023	0.001	0.000	0.002	0.000
	C	0.001	0.016	0.002	0.002	0.002	0.051	0.002	0.000	0.002	0.000
	D	0.001	0.017	0.003	0.002	0.002	0.105	0.003	0.000	0.003	0.000
	E	0.001	0.017	0.003	0.003	0.002	0.140	0.004	0.000	0.003	0.000
	F	0.001	0.014	0.004	0.005	0.002	0.095	0.005	0.000	0.003	0.000
	G	0.002	0.009	0.005	0.006	0.003	0.073	0.007	0.000	0.005	0.000
	H	0.003	0.004	0.004	0.012	0.006	0.058	0.007	0.000	0.010	0.000
	I	0.113	0.000	0.003	0.015	0.010	0.049	0.005	0.000	0.020	0.000
	J	0.004	-0.002	0.002	0.012	0.013	0.044	0.004	0.000	0.037	0.000
	K	0.005	-0.004	0.001	0.007	0.014	0.042	0.003	0.000	0.051	0.000
	L	0.005	-0.004	0.000	0.004	0.013	0.041	0.002	0.000	0.050	0.000
	M	0.004	-0.004	0.000	0.003	0.012	0.040	0.002	0.000	0.044	0.000
	N	0.002	-0.005	0.000	0.000	0.007	0.039	0.001	0.000	0.030	0.000

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Table A-6
Multiple-Wheel Heavy Gear Load Flexible Pavement Test, Static Instrumentation Loading Data
Item 3; Load Condition: 30 kips per wheel, Twin Tandem, 100 psi

Row	Loca- tion	Vertical Pressure, psi, at Indicated Cells										Rebound									
		Total										Rebound									
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
1	A	0.27	1.22	-0.43	0.83	0.17	0.28	0.85	1.02	1.05	0.55	-0.26	0.73	-0.26	0.00	-0.17	0.79	0.85	0.62	0.70	0.18
	B	1.38	1.46	-0.43	0.71	0.17	1.13	1.36	0.71	0.88	0.38	0.55	0.97	-0.26	-0.12	-0.17	1.24	1.06	0.31	0.53	0.00
	C	3.96	1.95	-0.35	0.40	0.17	2.26	1.48	0.81	0.88	0.38	3.13	1.46	-0.18	-0.23	-0.17	2.37	1.48	0.41	0.53	0.00
	D	5.99	2.44	-0.17	0.71	0.17	3.16	1.69	0.81	0.94	0.56	5.16	1.95	0.00	-0.12	-0.17	3.27	1.69	0.41	0.61	0.18
	E	8.48	2.92	0.25	0.83	0.17	4.74	1.90	0.81	1.05	0.38	7.65	2.43	0.42	0.00	-0.17	4.85	1.90	0.41	0.70	0.00
	F	10.97	3.90	1.72	1.31	0.17	6.78	2.64	1.02	1.66	0.38	10.14	3.41	1.89	0.48	-0.17	6.89	2.64	0.62	1.31	0.00
	G	12.44	4.87	5.70	2.26	0.17	7.91	3.17	2.24	2.62	0.47	11.61	4.38	6.87	1.43	-0.17	8.02	3.17	1.84	2.27	0.09
	H	13.09	5.48	9.06	3.16	0.17	8.58	3.59	2.75	3.76	0.36	12.26	4.99	10.13	2.73	-0.17	8.60	3.59	2.35	3.41	0.00
	I	10.14	5.72	9.28	4.87	0.17	7.55	3.70	2.44	4.90	-0.20	9.31	5.23	12.71	4.04	-0.17	6.66	3.70	2.04	4.55	-0.66
	J	5.16	5.39	12.54	5.42	0.17	3.16	3.38	3.46	5.40	-0.19	4.33	4.87	12.71	4.90	-0.17	3.27	3.38	3.06	5.25	-0.57
	K	2.77	4.38	9.71	5.37	0.17	1.13	2.85	2.14	5.60	-0.56	1.94	3.89	9.88	5.47	-0.17	1.24	2.85	1.74	5.25	-0.94
	L	2.21	4.02	5.35	5.15	0.17	0.48	2.53	0.81	5.42	-0.56	1.35	3.53	6.52	5.35	-0.17	0.79	2.53	0.41	5.07	-0.94
	M	1.75	3.41	1.00	3.03	0.17	0.23	2.11	0.10	4.72	-0.37	0.92	2.92	3.17	4.75	-0.17	0.34	2.11	-0.30	4.37	-0.75
	N	1.48	2.44	1.03	3.92	0.17	-0.11	1.48	-0.11	3.32	-0.75	0.65	1.95	1.00	3.09	-0.17	0.00	1.48	-0.81	2.97	-1.13

Vertical Deflection, in., at Indicated Cells

Row	Loca- tion	Total										Rebound									
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
1	A	0.018	0.005	0.000	0.001	0.001	0.020	0.007	0.000	0.000	0.000	0.031	0.008	0.000	0.003	0.002	0.021	-0.002	0.001	0.002	0.002
	B	0.012	0.009	0.000	0.001	0.001	0.002	0.004	0.000	0.000	0.000	0.045	0.012	0.000	0.003	0.000	0.003	-0.003	0.001	0.002	0.002
	C	0.048	0.014	0.000	0.001	0.000	0.003	0.007	0.000	0.000	0.000	0.061	0.017	0.000	0.003	-0.001	0.004	0.004	0.001	0.002	0.002
	D	0.055	0.016	0.000	0.002	0.000	0.004	0.002	0.000	0.000	0.000	0.068	0.019	0.000	0.004	-0.001	0.005	0.005	0.001	0.002	0.002
	E	0.061	0.017	0.000	0.002	0.001	0.004	0.001	0.000	-0.001	0.001	0.074	0.020	0.000	0.004	-0.002	0.005	0.005	0.001	-0.001	0.001
	F	0.072	0.016	0.000	0.003	0.000	0.003	0.001	0.000	0.000	0.000	0.075	0.019	0.000	0.005	-0.001	0.004	0.005	0.001	0.002	0.002
	G	0.067	0.012	0.000	0.006	0.005	0.002	0.003	0.001	0.000	0.000	0.060	0.015	0.000	0.008	-0.006	0.003	0.008	0.002	0.002	0.002
	H	0.085	0.008	0.000	0.007	0.007	0.001	0.003	0.002	0.001	0.001	0.098	0.011	0.000	0.009	-0.007	0.002	0.008	0.003	0.003	0.003
	I	0.085	0.003	0.000	0.004	0.003	0.000	0.000	0.002	0.003	0.003	0.088	0.006	0.000	0.011	0.012	0.001	0.005	0.003	0.005	0.005
	J	0.008	0.006	0.000	0.009	0.003	-0.001	-0.001	0.002	0.005	0.005	-0.005	0.003	0.000	0.011	0.022	0.000	-0.004	0.003	0.007	0.007
	K	-0.015	-0.002	0.000	0.007	0.013	-0.001	-0.003	0.001	0.007	0.007	-0.002	0.001	0.000	0.009	0.042	0.000	0.002	0.002	0.009	0.009
	L	-0.019	-0.003	0.000	0.004	0.009	-0.001	-0.004	0.001	0.007	0.007	-0.006	0.000	0.000	0.008	0.038	0.000	0.001	0.002	0.009	0.009
	M	-0.021	-0.003	0.000	0.005	0.004	-0.002	-0.004	0.000	0.006	0.006	-0.006	0.000	0.000	0.007	0.033	-0.001	-0.001	0.001	0.008	0.008
	N	-0.023	-0.004	0.000	0.002	0.005	-0.002	-0.005	0.000	0.005	0.005	-0.010	-0.001	0.000	0.004	0.024	-0.001	0.000	0.001	0.007	0.007

(Continued)

(1 of 15 sheets)

Table A-6 (Continued)

Loc- ation	Load Point	Vertical Pressure, psi, at Indicated Cells									
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
1	A	2.85	1.46	0.26	0.43	0.00	1.47	1.27	-0.81	0.69	-0.28
	B	4.06	1.95	0.35	0.43	0.00	3.84	1.69	-0.72	0.87	-0.18
	C	7.84	2.80	0.46	0.74	0.00	7.91	2.53	-0.71	1.22	-0.28
	D	9.03	3.28	1.46	0.95	0.00	9.49	2.75	-0.51	1.57	-0.28
	E	9.46	3.89	2.53	1.19	0.00	10.73	3.17	0.31	2.09	-0.28
	F	11.46	4.52	9.45	2.14	0.00	12.08	3.91	4.08	3.32	-0.18
	G	11.52	5.11	12.38	3.33	-0.17	13.10	-3.33	5.81	4.89	-0.18
	H	7.01	5.11	11.09	-4.52	17.33	8.58	4.44	5.50	-0.20	12.56
	I	3.14	-4.50	16.76	5.23	0.52	-4.07	3.84	8.25	6.99	7.69
	J	1.57	3.41	8.17	5.23	0.17	1.92	3.36	3.36	6.73	2.75
	K	-0.83	2.63	2.41	-4.26	17.98	1.02	2.22	0.82	4.98	29.63
	L	0.74	2.07	1.46	3.44	-0.69	0.79	1.90	7.51	4.28	9.65
	M	0.56	1.70	1.34	2.28	-2.43	0.57	1.59	0.72	3.49	1.68
	N	0.37	1.39	0.61	1.47	-2.43	0.46	0.97	0.51	2.09	1.13

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Loc- ation	Load Point	Vertical Reflection, in., at Indicated Cells									
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
1	A	0.073	0.021	0.000	0.002	0.000	0.000	0.002	0.000	0.002	0.001
	B	0.162	0.028	0.000	0.003	0.000	0.000	0.003	0.000	0.002	0.001
	C	0.153	0.032	0.000	0.004	0.000	0.000	0.007	0.002	0.001	0.001
	D	0.183	0.032	0.000	0.000	0.000	0.000	0.010	0.002	0.002	0.002
	E	0.240	0.030	0.000	0.000	0.000	0.000	0.012	0.002	0.002	0.003
	F	0.163	0.024	0.000	0.000	0.000	0.000	0.013	0.003	0.003	0.003
	G	0.112	0.016	0.000	0.000	0.000	0.000	0.010	0.003	0.004	0.005
	H	0.079	0.009	0.000	0.000	0.000	0.000	0.010	0.002	0.005	0.008
	I	0.060	0.005	0.000	0.000	0.000	0.000	0.009	0.002	0.005	0.012
	J	0.049	0.002	0.000	0.000	0.000	0.000	0.008	0.000	0.005	0.016
	K	0.042	0.001	0.000	0.000	0.000	0.000	0.007	0.002	0.004	0.018
	L	0.040	0.000	0.000	0.000	0.000	0.000	0.006	0.001	0.003	0.015
	M	0.038	0.000	0.000	0.000	0.000	0.000	0.005	0.000	0.002	0.014
	N	0.036	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.002	0.012

(Continued)

(2 of 15 sheets)

Table A-6(Continued)

Row	Loca- tion	Vertical Pressure, psi, at Indicated Cells										Rebound									
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	F ₁	F ₂	F ₃	F ₄	F ₅	F ₆	F ₇	F ₈	F ₉	F ₁₀
2	1	7.10	2.43	2.58	0.60	0.18	5.21	2.32	-0.11	1.24	0.00	6.45	2.14	-1.36	0.48	0.00	5.04	2.00	-1.52	0.88	0.00
	G	11.34	4.62	3.77	1.90	0.18	10.50	3.70	3.06	2.89	0.18	10.69	4.36	6.01	1.76	0.00	9.93	3.38	1.43	2.63	0.18
	H	12.35	5.13	13.24	3.21	0.18	11.74	4.12	4.89	4.37	-0.28	11.70	4.99	11.08	3.00	0.00	11.17	3.80	3.26	4.11	-0.28
	I	3.76	5.35	10.64	4.52	0.87	9.81	4.22	4.06	5.68	0.81	8.21	4.11	8.59	4.40	0.69	8.24	3.90	2.45	5.42	0.81
	J	4.24	4.87	16.92	5.23	5.37	4.63	3.91	6.52	6.38	1.21	3.59	4.03	14.06	5.11	5.19	4.06	3.59	4.69	6.12	1.21
	K	2.03	3.89	11.85	5.70	0.18	2.15	3.17	4.26	6.17	-0.66	3.38	3.65	9.79	5.58	0.00	1.58	2.85	2.65	6.21	-0.66
2	E	6.82	2.30	1.46	0.96	0.18	14.22	2.95	0.00	1.84	-0.29	7.00	3.05	1.63	0.95	0.00	14.33	2.85	0.51	1.66	+0.09
	G	7.17	-0.32	6.79	2.97	0.18	15.80	4.01	3.97	4.99	-0.19	7.65	4.27	6.49	2.97	0.00	15.91	3.91	4.48	4.81	-0.19
	H	4.70	3.89	7.70	3.68	0.52	12.41	4.01	3.97	5.36	2.81	4.88	4.14	6.87	3.68	0.34	12.52	3.91	4.48	5.68	3.19
	I	1.94	1.41	13.02	4.27	3.18	7.06	3.59	6.00	6.65	1.31	2.12	3.66	14.09	4.27	0.00	4.17	3.19	6.51	6.17	1.69
	J	0.64	2.48	5.13	4.27	0.18	1.80	3.95	2.85	6.38	-0.18	0.83	2.93	5.50	4.27	0.00	1.50	2.85	3.36	6.20	0.00
	K	3.10	1.95	0.86	3.32	2.43	1.01	2.21	0.30	4.99	7.50	0.37	2.20	1.03	3.32	2.25	1.12	2.11	0.81	4.81	7.97

Row	Loca- tion	Vertical Pressure, psi, at Indicated Cells										Rebound									
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	F ₁	F ₂	F ₃	F ₄	F ₅	F ₆	F ₇	F ₈	F ₉	F ₁₀
2	1	0.98	0.023	0.000	0.001	0.000	0.000	0.005	0.002	0.000	0.000	0.071	0.023	0.000	0.002	0.002	0.005	0.003	0.001	0.000	0.000
	G	0.96	0.117	0.000	0.004	0.005	0.004	0.010	0.002	0.002	0.002	0.061	0.017	0.000	0.007	0.003	0.004	0.008	0.002	0.002	0.002
	H	0.97	0.011	0.000	0.011	0.012	0.003	0.010	0.003	0.004	0.004	0.077	0.011	0.000	0.010	0.015	0.003	0.008	0.003	0.004	0.004
	I	0.004	0.006	0.000	0.013	0.022	0.001	0.006	0.003	0.007	0.007	0.000	0.006	0.000	0.012	0.025	0.001	0.006	0.003	0.003	0.007
	J	-0.011	0.003	0.000	0.013	0.001	0.000	0.005	0.003	0.009	0.011	-0.023	0.003	0.000	0.012	0.034	0.000	0.003	0.003	0.003	0.009
	K	-0.002	0.000	0.000	0.011	0.009	-0.001	0.003	0.003	0.011	0.011	-0.022	0.000	0.000	0.010	0.042	-0.001	0.001	0.003	0.011	0.011
2	E	0.204	0.034	0.000	0.000	0.003	0.009	0.016	0.003	-0.003	0.003	0.232	0.049	0.000	0.035	0.011	0.023	0.016	0.017	+0.003	+0.003
	G	0.96	0.000	0.000	-0.002	0.015	-0.010	0.014	-0.010	0.002	0.002	0.094	0.015	0.000	+0.015	0.013	+0.004	0.014	+0.004	0.009	0.009
	H	-0.002	-0.009	0.000	-0.003	0.027	-0.012	0.011	-0.010	0.006	0.006	+0.026	+0.006	0.000	+0.014	0.035	+0.002	0.011	+0.004	0.014	0.014
	I	-0.014	-0.012	0.000	-0.003	0.039	-0.013	0.007	-0.010	0.014	0.014	+0.014	+0.003	0.000	+0.014	0.047	+0.001	0.007	+0.004	0.020	0.020
	J	-0.022	-0.015	0.000	-0.005	0.047	-0.014	0.003	-0.010	0.018	0.018	+0.006	0.000	0.000	+0.012	0.035	0.000	0.003	+0.004	0.024	0.024
	K	-0.024	-0.015	0.000	-0.006	0.045	-0.014	0.001	-0.011	0.015	0.015	-0.004	0.000	0.000	+0.009	0.033	0.000	0.001	+0.002	0.021	0.021

(Continued)

(3 of 15 sheets)

Table A-6 (Continued)

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells									
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
3	1	E	5.90	2.31	0.51	0.59	0.00	10.84	2.00	-0.71	1.05	-0.47
		G	8.85	3.90	6.01	1.66	0.00	15.13	3.37	2.55	2.62	-0.37
		H	9.77	4.51	14.60	2.85	0.00	16.46	3.90	5.50	4.02	-0.56
		I	6.91	4.63	8.59	3.92	0.42	13.55	3.80	4.26	3.42	2.07
		J	2.95	4.14	17.87	4.51	10.23	4.74	3.69	7.13	6.30	23.72
		K	1.43	3.53	13.06	4.97	0.00	2.29	3.26	4.69	6.47	0.28
	2	E	4.98	2.68	0.43	1.71	-0.17	14.90	2.85	0.31	1.75	-0.10
		G	4.88	3.54	2.23	2.13	-0.17	16.93	4.03	3.87	4.53	-0.17
		H	2.58	3.54	2.40	2.85	-0.17	12.19	-1.12	4.48	6.21	-0.94
		I	0.83	3.05	3.09	3.20	-0.17	7.48	3.49	5.60	6.82	-1.04
		J	0.00	2.32	1.20	1.48	-0.17	1.70	2.85	2.85	6.47	-1.22
		K	-0.46	1.59	-0.17	2.61	-0.17	0.91	2.02	0.21	4.00	-0.75

Row	Load Point	Location	Vertical Deflection, in., at Indicated Cells									
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
3	1	E	0.136	0.032	0.000	0.014	0.004	0.004	0.004	0.002	0.000	0.000
		G	0.155	0.025	0.000	0.010	0.013	0.007	0.017	0.003	0.000	0.000
		H	0.097	0.017	0.000	0.014	0.019	0.004	0.021	0.004	0.004	0.000
		I	0.080	0.010	0.000	0.016	0.013	0.003	0.007	0.004	0.004	0.000
		J	0.040	0.005	0.000	0.016	0.016	0.004	0.007	0.004	0.004	0.000
		K	0.030	0.003	0.000	0.014	0.007	0.000	0.004	0.004	0.004	0.000
	2	E	0.115	0.044	0.000	0.010	0.020	0.014	0.014	0.003	0.004	0.003
		G	0.043	0.006	0.000	0.020	0.042	0.006	0.023	0.006	0.006	0.002
		H	0.016	0.016	0.000	0.024	0.004	0.003	0.023	0.007	0.007	0.010
		I	0.001	0.010	0.000	0.023	0.000	0.001	0.004	0.006	0.006	0.003
		J	-0.007	0.007	0.000	0.000	0.001	0.000	0.003	0.003	0.003	0.001
		K	-0.012	0.005	0.000	0.015	0.002	-0.002	-0.002	0.000	0.000	0.000

(Continued)

(1 of 15 sheets)

Table A-6 (Continued)

Row	Load Point	Loca- tion	Vertical Pressure, Psi, at Indicated Cells										Vertical Deflection, in., at Indicated Gages																					
			Total										Rebound																					
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀		
4	2	E	3.87	2.44	0.43	0.71	0.00	14.34	2.85	0.51	1.57	0.00	4.06	2.44	0.69	0.83	0.00	0.00	14.11	2.85	-0.20	1.57	-0.29											
		G	3.77	3.29	1.63	1.78	0.00	16.93	3.80	4.99	4.37	-0.09	3.96	3.29	1.89	1.90	0.00	0.00	17.70	3.80	4.28	4.37	-0.38											
		H	2.21	3.41	1.80	2.37	0.00	13.10	3.90	4.99	5.68	0.85	2.40	3.41	2.06	2.49	0.00	0.00	12.87	3.90	4.28	5.68	0.56											
		I	0.92	2.92	1.80	2.73	0.00	8.35	3.59	7.53	6.55	1.22	1.11	2.92	2.06	2.85	0.00	0.00	8.12	3.59	6.82	6.55	0.93											
		J	0.13	2.29	0.86	2.73	0.00	2.03	2.74	3.97	6.29	0.47	0.37	2.29	2.12	2.65	0.00	0.00	1.80	2.74	3.96	6.29	0.18											
		K	-0.19	1.71	0.08	2.02	0.25	1.13	3.84	1.52	4.63	4.97	0.00	1.71	0.34	2.14	0.25	0.25	0.90	3.84	0.5	4.63	4.68											
4	2	E	0.131	0.050	0.000	0.011	0.014	0.015	0.030	0.005	0.003		0.136	0.048	0.000	0.009	-0.010	0.016	0.033	0.005	0.005													
		G	0.059	0.027	0.000	0.021	0.036	0.007	0.030	0.008	0.014		0.054	0.025	0.000	0.19	0.012	0.008	0.031	0.008	0.016													
		H	0.034	0.017	0.000	0.025	0.063	0.004	0.022	0.009	0.023		0.039	0.015	0.000	0.023	0.039	0.005	0.025	0.009	0.025													
		I	0.020	0.009	0.000	0.025	0.082	0.001	0.014	0.008	0.034		0.025	0.007	0.000	0.023	0.058	0.002	0.017	0.008	0.036													
		J	0.012	0.006	0.000	0.021	0.097	0.000	0.006	0.007	0.043		0.017	0.004	0.000	0.019	0.073	0.001	0.009	0.007	0.045													
		K	0.008	0.004	0.000	0.016	0.105	-0.001	0.001	0.005	0.036		0.013	0.002	0.000	0.014	0.081	0.00	0.004	0.005	0.038													

(Continued)

(5 of 15 sheets)

Table A-6(Continued)

Row	Loca- tion	Vertical Pressure, psi, at Indicated Cells										Rebound										
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	
5	1	A	0.55	0.73	-0.17	0.47	-0.17	0.23	0.85	-0.61	0.79	0.00	0.92	0.85	-0.17	0.71	0.00	0.23	0.74	-0.30	0.79	1.13
		B	1.10	0.98	-0.34	0.35	-0.17	0.13	1.06	-0.61	0.53	0.00	1.47	1.10	0.00	0.59	0.00	0.12	0.95	-0.30	0.53	1.13
		C	2.03	1.22	-0.26	0.35	-0.17	3.16	1.37	-0.71	0.53	0.00	2.40	1.34	-0.03	0.59	0.00	3.16	1.26	-0.20	0.53	1.13
		D	2.76	1.47	-0.26	0.35	0.00	5.19	1.80	-0.81	0.70	0.00	3.13	1.59	-0.08	0.59	-0.17	5.19	1.69	-0.10	0.70	1.13
		E	3.59	1.83	-0.17	0.47	0.00	11.29	2.02	-0.61	0.88	0.00	3.95	1.95	-0.17	0.71	-0.17	11.29	1.90	-0.30	0.88	1.13
		F	4.79	2.44	0.43	0.71	-0.17	14.45	2.75	-0.10	1.57	0.00	5.16	2.56	0.77	0.95	0.00	14.45	2.64	-0.81	1.57	1.13
		G	5.25	3.05	1.29	1.18	0.00	16.14	3.38	2.45	2.62	-0.10	5.62	3.17	1.63	1.42	0.17	16.14	3.27	3.36	2.62	-1.03
		H	5.34	3.41	2.40	1.90	-0.17	17.16	3.91	3.97	4.20	-0.19	5.71	3.53	2.74	2.14	0.00	17.16	3.80	4.88	4.20	-0.94
		I	3.32	3.54	2.23	2.61	-0.17	14.00	3.70	3.67	5.77	-0.94	3.69	3.66	2.57	2.85	0.00	14.00	3.59	4.58	5.77	-0.19
		J	1.20	3.17	3.09	3.08	-0.17	8.81	3.70	5.50	6.64	-0.94	1.57	3.29	3.43	3.32	0.00	8.81	3.59	6.41	6.64	-0.19
		K	0.09	2.44	1.80	3.08	-0.17	2.03	2.85	3.67	1.64	-1.22	0.46	2.56	2.14	3.32	0.00	2.03	2.74	4.58	6.64	-0.09
		L	-0.19	2.20	0.59	2.97	-0.17	1.47	2.64	1.63	6.12	-1.04	-0.18	2.32	1.03	3.21	0.00	1.47	2.53	2.54	6.12	-0.09
		M	-0.46	1.71	0.00	2.61	-0.17	1.13	2.22	0.51	5.25	-1.04	-0.09	1.83	0.34	2.85	0.00	1.13	2.11	1.52	5.25	-0.09
		N	-0.55	1.22	-0.52	1.78	-0.17	0.68	1.59	-0.20	3.50	-0.94	-0.18	1.34	-0.18	2.02	0.00	0.68	1.48	-0.71	3.50	-0.19

Vertical Reflection, in., at Indicated Gages

Row	Loca- tion	Total										Rebound									
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
5	1	A	0.020	0.015	0.000	0.003	0.031	0.006	0.001	0.002	-0.007	0.047	0.011	0.000	0.000	0.004	0.007	-0.005	0.002	-0.004	-0.004
		B	0.046	0.027	0.000	0.003	0.024	0.010	-0.016	0.001	-0.006	0.073	0.023	0.000	0.000	-0.003	0.011	-0.012	0.002	-0.005	-0.005
		C	0.077	0.038	0.000	0.004	0.020	0.013	0.008	0.001	-0.004	0.104	0.034	0.000	0.001	-0.007	0.014	-0.012	0.002	-0.007	-0.007
		D	0.087	0.043	0.000	0.005	0.019	0.015	0.010	0.001	-0.004	0.114	0.039	0.000	0.002	-0.008	0.016	-0.014	0.002	-0.007	-0.007
		E	0.095	0.046	0.000	0.006	0.019	0.015	0.014	0.005	-0.003	0.122	0.042	0.000	0.003	-0.008	0.016	0.018	0.007	-0.006	-0.006
		F	0.113	0.048	0.000	0.009	0.020	0.015	0.014	0.003	-0.004	0.140	0.044	0.000	0.006	-0.007	0.016	0.018	0.004	-0.007	-0.007
		G	0.090	0.041	0.000	0.014	0.025	0.011	0.027	0.004	-0.006	0.117	0.037	0.000	0.011	-0.002	0.012	0.031	0.005	-0.005	-0.005
		H	0.054	0.029	0.000	0.018	0.037	0.008	0.020	0.006	0.011	0.081	0.025	0.000	0.015	0.010	0.009	0.024	0.007	0.000	0.000
		I	0.023	0.018	0.000	0.023	0.058	0.004	0.016	0.007	0.019	0.050	0.014	0.000	0.020	0.011	0.005	0.020	0.008	0.008	0.008
		J	0.005	0.012	0.000	0.024	0.075	0.002	0.008	0.005	0.028	0.033	0.008	0.000	0.021	0.018	0.003	0.012	0.007	0.017	0.017
		K	-0.004	0.008	0.000	0.021	0.068	0.000	0.003	0.005	0.053	-0.023	0.004	0.000	0.018	0.011	0.001	-0.007	0.006	0.042	0.042
		L	-0.009	0.006	0.000	0.019	0.094	0.000	0.002	0.004	0.046	-0.018	0.002	0.000	0.016	0.016	0.007	-0.006	0.035	0.035	0.035
		M	-0.011	0.005	0.000	0.015	0.094	-0.001	-0.001	0.003	0.041	-0.016	0.001	0.000	0.013	0.013	0.000	-0.003	0.004	0.030	0.030
		N	-0.013	0.004	0.000	0.012	0.079	-0.001	-0.003	0.002	0.034	-0.014	0.000	0.000	0.009	0.009	0.000	-0.001	0.005	0.023	0.023

(Continued)

(6 of 15 sheets)

Table A-6 (Continued)

Row	Load Point	Loca- tion	Vertical Pressure, psi, at Indicated Cells										Rebound										
			Total																				
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	F _r	P ₆	P ₇	P ₈	P ₉	P ₁₀	
5	2	A	2.40	0.73	-0.09	0.24	0.18	1.58	1.05	-0.41	0.52	+0.18	2.67	0.97	+0.25	0.48	0.00	1.02	1.05	-0.81	0.70	-0.74	-0.74
		B	1.29	1.10	-0.17	0.24	0.18	3.38	1.48	-0.30	0.52	+0.09	1.56	1.34	+0.17	0.48	0.00	2.82	1.48	-0.92	0.70	-0.84	-0.84
		C	2.12	1.46	0.00	0.24	0.18	11.06	1.90	+0.20	0.87	+0.09	2.39	1.70	0.34	0.48	0.00	10.50	1.90	-1.02	1.05	-0.84	-0.84
		D	2.58	1.71	+0.09	0.47	0.18	12.41	2.32	-0.10	1.04	+0.09	2.85	1.95	0.43	0.71	0.00	11.85	2.32	-1.32	1.22	-0.84	-0.84
		E	2.95	1.95	0.26	0.47	0.18	13.54	2.74	+0.41	1.57	+0.09	3.22	2.19	0.60	0.71	0.00	12.98	2.74	-0.81	1.75	-0.84	-0.84
		F	3.13	2.44	0.69	0.95	0.18	14.67	3.38	3.66	2.53	0.00	3.40	2.68	1.03	1.19	0.00	14.11	3.38	2.44	2.71	-0.93	-0.93
		G	2.58	2.68	1.37	1.42	0.18	15.35	3.59	5.29	3.84	-0.19	2.85	2.92	1.71	1.66	0.00	14.79	3.59	4.07	4.02	-1.12	-1.12
		H	3.32	2.56	1.72	1.90	0.18	11.74	3.69	4.89	5.24	5.24	3.59	2.80	2.06	2.14	0.00	11.16	3.69	3.67	5.42	1.31	1.31
		I	0.55	2.19	0.86	2.14	0.18	3.16	3.06	8.25	5.94	2.62	0.82	2.43	1.20	2.38	0.00	2.60	3.06	7.03	6.12	1.69	1.69
		J	0.09	1.83	0.52	2.14	0.18	5.30	2.74	4.13	5.77	1.31	0.36	2.07	0.86	2.38	0.00	4.74	2.74	3.26	5.95	0.38	0.38
		K	-0.18	1.22	0.00	1.54	0.18	0.68	2.00	2.04	4.28	1.68	+0.09	1.46	0.34	1.78	0.00	0.12	2.00	0.82	4.46	0.75	0.75
		L	-0.18	1.10	0.00	1.42	0.18	0.68	1.69	1.63	3.49	8.24	+0.09	1.34	0.34	1.66	0.00	0.12	1.69	0.41	3.67	7.31	7.31
		M	-0.27	0.85	-0.09	1.19	0.52	+0.45	1.26	1.42	2.62	1.87	0.00	1.09	+0.25	1.43	0.34	-0.11	1.26	0.20	2.80	0.94	0.94
		N	-0.37	0.49	-0.17	0.71	0.18	+0.22	0.84	1.22	1.48	1.50	-0.10	0.73	+0.17	0.95	0.00	-0.34	0.84	0.00	1.66	0.57	0.57

Row	Load Point	Loca- tion	Vertical Deflection, in., at Indicated Gages										Rebound									
			Total																			
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	
5	2	A	0.079	0.038	0.000	+0.002	-0.008	0.016	+0.005	0.001	0.003		0.013	0.032	0.000	-0.002	-0.045	0.016	+0.006	0.000	0.009	
		B	0.147	0.054	0.000	+0.003	-0.011	0.022	0.013	0.002	0.001		0.041	0.048	0.000	-0.001	-0.048	0.022	0.014	0.001	0.007	
		C	0.144	0.063	0.000	0.006	-0.012	0.025	0.026	0.001	0.001		0.078	0.057	0.000	0.002	-0.049	0.025	0.027	0.003	0.007	
		D	0.185	0.069	0.000	0.008	-0.012	0.025	0.031	0.005	0.001		0.119	0.063	0.000	0.004	-0.049	0.025	0.032	0.004	0.007	
		E	0.230	0.068	0.000	0.011	-0.009	0.024	0.037	0.006	0.002		0.164	0.062	0.000	0.007	-0.046	0.024	0.038	0.005	0.008	
		F	0.165	0.056	0.000	0.018	-0.001	0.173	0.044	0.009	0.007		0.099	0.050	0.000	0.014	-0.038	0.173	0.045	0.008	0.013	
		G	0.122	0.039	0.000	0.024	+0.018	0.013	0.040	0.011	0.017		0.056	0.033	0.000	0.020	-0.019	0.013	0.041	0.010	0.023	
		H	0.093	0.025	0.000	0.030	0.085	0.007	0.032	0.013	0.031		0.027	0.019	0.000	0.026	0.048	0.007	0.033	0.012	0.037	
		I	0.076	0.016	0.000	0.031	0.115	0.003	0.015	0.012	0.046		0.010	0.010	0.000	0.027	0.078	0.003	0.016	0.011	0.052	
		J	0.068	0.011	0.000	0.028	0.134	0.001	0.010	0.011	0.054		0.002	0.005	0.000	0.024	0.097	0.001	0.011	0.010	0.060	
		K	+0.065	0.009	0.000	0.021	0.172	0.000	+0.006	0.008	0.050		-0.001	0.003	0.000	0.017	0.135	0.000	0.007	0.007	0.056	
		L	+0.063	0.009	0.000	0.018	0.156	0.000	+0.004	0.007	0.046		-0.003	0.003	0.000	0.014	0.119	0.000	+0.005	0.006	0.059	
		M	+0.062	0.008	0.000	0.015	0.125	0.000	+0.002	0.005	0.039		-0.004	0.002	0.000	0.011	0.068	0.000	+0.003	0.004	0.045	
		N	+0.061	0.007	0.000	0.010	0.087	-0.001	+0.001	0.003	0.025		-0.005	0.001	0.000	0.006	0.050	-0.001	+0.002	0.002	0.031	

(Continued)

(7 of 15 sheets)

Table A-6 (Continued)

Load Point	Loca- tion	Vertical Pressure, psi, at Indicated Cells									
		1	2	3	4	5	6	7	8	9	10
6	E	1.84	1.46	-0.09	0.24	0.18	10.95	1.90	-0.20	0.70	+0.09
	G	3.23	2.19	0.52	0.83	0.18	14.33	3.17	2.14	2.18	+0.09
	F	2.86	2.56	1.12	1.19	0.18	15.57	3.59	5.60	3.45	-0.10
	I	1.66	2.68	1.80	1.66	0.18	12.64	3.80	4.38	5.77	1.31
	J	0.74	2.44	1.20	2.14	0.18	9.25	3.48	7.43	5.77	11.53
	K	0.19	1.95	0.60	2.14	0.18	2.03	2.85	5.50	5.77	+0.28
	L	0.74	2.31	1.03	2.14	0.18	3.84	3.38	8.86	6.20	14.81
2	E	2.12	1.46	0.17	0.46	0.00	9.37	2.43	-0.20	1.39	0.00
	G	1.75	1.95	1.72	0.95	0.00	9.93	3.17	0.92	3.14	-0.37
	H	1.11	1.95	3.26	1.31	0.00	7.67	3.28	0.82	4.02	-0.94
	I	0.55	1.70	1.37	1.43	0.00	1.47	2.85	1.33	4.54	-1.12
	J	0.28	1.21	0.86	1.43	0.35	0.22	2.22	-0.30	4.19	-1.12
	K	0.19	0.97	0.77	1.19	0.20	-0.23	1.80	-1.42	3.32	-1.31

250

Load Point	Loca- tion	Vertical Reflection, in., at Indicated Gages									
		1	2	3	4	5	6	7	8	9	10
6	E	0.159	0.067	0.000	0.006	-0.013	0.025	0.025	0.003	0.000	0.000
	G	0.182	0.361	0.000	0.016	-0.004	0.021	0.043	0.008	0.005	0.005
	H	0.175	0.122	0.000	0.022	-0.011	0.015	0.042	0.010	0.013	0.013
	I	0.048	0.028	0.000	0.029	0.057	0.008	0.035	0.012	0.027	0.027
	J	0.061	0.019	0.000	0.031	0.117	0.005	0.020	0.013	0.041	0.041
	K	0.071	0.013	0.000	0.028	0.121	0.002	0.010	0.011	0.052	0.052
	L	0.274	0.015	0.000	0.031	0.135	0.003	0.000	0.013	0.047	0.047
2	E	0.052	0.070	0.000	0.014	0.003	0.044	0.004	0.008	0.018	0.018
	G	0.016	0.039	0.000	0.029	0.029	0.025	0.108	0.017	0.040	0.040
	H	-0.001	0.024	0.000	0.035	-0.070	0.015	0.089	0.020	0.066	0.066
	I	-0.011	0.015	0.000	0.005	0.100	0.009	0.055	0.020	0.088	0.088
	J	-0.017	0.010	0.000	0.012	0.125	0.006	0.037	0.017	0.119	0.119
	K	-0.021	0.008	0.000	0.025	0.140	0.004	0.024	0.013	0.136	0.136

(Continued)

(8 of 15 sheets)

Table A-6 (Continued)

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells										Rebound									
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
7	1	B	0.37	0.73	0.68	0.36	0.00	1.13	0.97	0.00	0.70	0.00	0.37	0.73	-0.43	0.36	0.00	1.58	0.84	1.42	0.79	0.09
		C	0.74	0.97	0.86	0.36	0.00	2.14	1.27	0.00	0.70	0.00	0.74	0.97	-0.35	0.36	0.00	2.59	1.16	1.42	0.79	0.09
		D	0.92	0.97	0.00	0.36	0.00	2.71	1.48	0.00	0.70	0.00	0.92	0.97	-0.51	0.36	0.00	3.16	1.37	1.42	0.79	0.09
		E	1.11	1.09	0.08	0.48	0.00	3.61	1.80	-0.10	0.87	0.00	1.11	1.09	-0.43	0.48	0.00	4.06	1.69	1.32	0.96	0.09
		F	1.84	1.46	0.17	0.43	0.00	5.19	2.22	-0.10	1.22	0.00	1.84	1.46	-0.34	0.48	0.00	5.64	2.11	1.32	1.31	0.09
		G	2.40	1.70	0.34	0.71	0.35	9.93	2.85	0.41	2.01	0.00	2.40	1.70	-0.17	0.71	0.35	10.38	2.74	1.83	2.10	0.09
		H	1.84	1.95	1.11	0.95	0.00	10.16	3.06	1.02	2.97	-0.19	1.84	1.95	0.60	0.95	0.00	10.61	2.95	2.44	3.06	-0.10
		I	1.20	1.95	3.43	1.19	0.00	9.48	3.17	0.72	3.84	-0.84	1.20	1.95	2.92	1.15	0.00	9.92	3.06	2.14	3.93	-0.75
		J	0.74	1.70	1.72	1.43	0.00	5.87	3.06	1.33	4.45	-1.12	0.74	1.70	1.21	1.43	0.00	6.32	2.95	2.75	4.54	-1.03
		K	0.37	1.46	1.03	1.43	5.03	5.03	2.43	0.31	4.37	-1.12	0.37	1.46	0.52	1.43	5.03	1.01	2.32	1.73	4.46	-1.03
		L	0.19	1.21	0.86	1.43	0.00	0.11	2.22	-0.51	4.02	-1.22	0.19	1.21	0.35	1.43	0.00	0.56	2.11	0.91	4.11	-1.13
		M	0.19	0.77	0.77	1.19	0.00	-0.23	1.90	-1.22	3.41	-1.31	0.19	0.97	0.26	1.19	0.00	+0.22	1.79	+0.20	3.50	-1.22
		N	0.00	0.73	0.69	0.95	0.00	-0.45	1.37	-1.83	2.36	-1.12	0.00	0.73	0.18	0.95	0.00	0.00	1.26	-0.41	2.45	-1.03

Row	Load Point	Location	Vertical Deflection, in., at Indicated Cells										Rebound									
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
7	1	B	0.029	0.037	0.000	0.004	0.004	0.026	0.015	0.002	0.021		0.42	0.033	0.000	-0.004	-0.005	0.022	0.000	0.000	-0.003	
		C	0.013	0.053	0.000	0.006	0.002	0.036	0.019	0.002	0.018		0.053	0.049	0.000	-0.002	-0.007	0.032	0.004	0.000	-0.006	
		D	0.045	0.060	0.000	0.006	0.001	0.039	0.027	0.003	0.017		0.058	0.056	0.000	-0.002	-0.008	0.035	0.012	0.001	-0.007	
		E	0.050	0.066	0.000	0.008	0.001	0.042	0.052	0.004	0.010		0.063	0.072	0.000	0.000	-0.008	0.038	0.037	0.002	-0.008	
		F	0.053	0.070	0.000	0.012	0.002	0.044	0.076	0.007	0.018		0.066	0.066	0.000	0.004	-0.007	0.040	0.021	0.005	-0.006	
		G	0.042	0.061	0.000	0.019	0.008	0.038	0.094	0.011	0.023		0.055	0.057	0.000	0.011	-0.001	0.034	0.075	0.009	-0.001	
		H	0.022	0.044	0.000	0.026	0.023	0.027	0.106	0.015	0.035		0.035	0.040	0.000	0.018	0.014	0.223	0.091	0.013	0.004	
		I	0.004	0.028	0.000	0.033	0.055	0.018	0.096	0.019	0.057		0.017	0.024	0.000	0.025	0.046	0.014	0.081	0.017	0.026	
		J	-0.008	0.018	0.000	0.036	+0.092	0.011	0.065	0.020	0.082		+0.005	0.014	0.000	0.028	+0.081	0.007	0.050	0.018	0.058	
		K	-0.015	0.012	0.000	0.033	0.114	0.007	0.043	0.018	0.099		-0.002	0.008	0.000	0.017	0.105	0.003	0.026	0.016	0.075	
		L	-0.018	0.010	0.000	0.031	0.136	0.005	0.033	0.017	0.106		-0.005	0.006	0.000	0.023	0.122	0.001	0.018	0.015	0.082	
		M	-0.020	0.008	0.000	0.027	0.140	0.004	0.024	0.014	0.108		-0.007	0.004	0.000	0.019	0.131	0.000	0.009	0.012	0.084	
		N	-0.022	0.007	0.000	0.021	0.112	0.003	0.020	0.010	0.094		-0.009	0.003	0.000	0.013	0.103	-0.001	0.005	0.008	0.070	

(Continued)

(9 of 15 sheets)

Table A-6(Continued)

Row	Loca- tion	Vertical Pressure, psi, at Indicated Cells										Rebound									
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
7	2	0.55	0.73	0.00	0.12	0.00	1.35	1.26	-0.11	0.44	-0.19	0.46	0.73	-0.17	0.24	-0.18	1.47	1.26	-0.30	0.70	-0.28
		0.92	0.56	0.00	0.24	0.00	2.25	1.47	-0.11	0.70	-0.09	0.83	0.86	-0.17	0.36	-0.18	2.37	1.47	-0.30	0.95	-0.36
		1.11	0.98	0.00	0.24	0.00	2.70	1.79	-0.11	0.79	-0.19	1.02	0.98	-0.17	0.36	-0.18	2.82	1.79	-0.30	1.05	-0.28
		1.29	0.98	0.00	0.24	0.00	3.04	1.90	0.00	0.96	-0.19	1.20	0.98	-0.17	0.36	-0.18	3.16	1.90	0.41	1.22	-0.28
		1.48	1.22	0.18	0.48	0.18	3.61	2.32	0.40	1.57	-0.19	1.39	1.22	-0.35	0.60	0.00	3.73	2.32	0.81	1.63	-0.28
		1.29	1.34	0.52	0.48	0.18	3.04	2.53	0.91	1.31	-1.12	1.20	1.34	0.69	0.60	0.00	3.15	2.53	1.32	1.57	-0.65
		0.74	1.22	0.69	0.71	0.00	1.91	2.64	1.22	2.80	-0.02	0.65	1.22	0.86	0.83	-0.18	2.03	2.64	1.63	3.06	-0.45
		0.55	1.22	0.35	0.71	0.18	1.24	2.32	1.01	2.97	-0.09	0.45	1.22	0.52	0.83	0.00	1.36	2.32	1.42	3.23	-0.38
		0.37	0.98	0.18	0.71	0.18	0.45	1.90	0.40	2.80	-0.37	0.28	0.98	0.35	0.83	0.00	0.57	1.90	0.81	3.06	-0.10
		0.28	0.73	0.03	0.71	0.35	0.00	1.47	0.00	2.10	-0.37	0.19	0.73	0.26	0.83	0.17	0.12	1.47	0.41	2.36	-0.10
		0.19	0.49	0.09	0.48	0.18	-0.12	1.26	-0.31	1.66	-0.37	0.10	0.49	0.26	0.60	0.00	0.00	1.26	-0.10	1.92	-0.10
		0.19	0.49	0.00	0.48	0.35	-0.12	1.05	-0.41	1.31	-0.37	0.10	0.49	0.17	0.64	0.17	0.00	1.05	0.00	1.57	-0.10
		0.09	0.25	0.00	0.24	0.35	-0.23	0.63	-0.51	0.76	-0.37	0.00	0.25	0.17	0.36	0.17	-0.11	0.63	-0.10	0.95	-0.10

Row	Loca- tion	Vertical Reflection, in., at Indicated Gages										Rebound									
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
7	2	0.030	0.052	0.000	0.004	-0.003	0.051	0.056	0.004	-0.001	-0.001	0.036	0.047	0.000	0.001	-0.046	0.045	0.001	0.000	-0.055	-0.055
		0.037	0.062	0.000	0.006	-0.003	0.051	0.083	0.007	-0.002	-0.002	0.043	0.057	0.000	0.003	-0.046	0.056	0.008	0.003	-0.056	-0.056
		0.037	0.065	0.000	0.008	-0.003	0.064	0.106	0.008	-0.001	-0.001	0.043	0.060	0.000	0.005	-0.046	0.059	0.091	0.004	-0.055	-0.055
		0.036	0.064	0.000	0.010	-0.005	0.063	0.120	0.011	-0.001	-0.001	0.042	0.059	0.000	0.007	-0.044	0.058	0.105	0.007	-0.053	-0.053
		0.027	0.053	0.000	0.017	-0.013	0.052	0.137	0.017	-0.011	-0.011	0.033	0.048	0.000	0.014	-0.036	0.047	0.220	0.013	-0.043	-0.043
		0.016	0.036	0.000	0.024	-0.031	0.035	0.158	0.022	-0.034	-0.034	0.022	0.031	0.000	0.021	-0.011	-0.030	0.143	0.018	-0.020	-0.020
		0.007	-0.055	0.000	0.029	0.087	0.023	0.132	0.027	0.096	0.096	0.013	-0.040	0.000	0.026	0.038	0.018	0.117	0.003	0.042	0.042
		0.002	0.015	0.000	0.030	0.131	0.015	0.064	0.068	0.153	0.153	0.008	0.010	0.000	0.027	0.082	0.010	0.059	0.024	0.099	0.099
		-0.001	0.010	0.000	0.027	0.113	0.010	0.051	0.025	0.159	0.159	-0.005	0.005	0.000	0.024	0.084	0.005	0.036	0.021	0.105	0.105
		-0.002	0.008	0.000	0.020	0.186	0.008	0.096	0.019	0.206	0.206	-0.004	0.003	0.000	0.017	0.137	0.003	0.021	0.035	0.152	0.152
		-0.004	0.007	0.000	0.016	0.163	0.007	0.089	0.016	0.191	0.191	-0.002	0.002	0.000	0.013	0.114	0.002	0.014	0.012	0.137	0.137
		-0.004	0.006	0.000	0.014	0.137	0.006	0.086	0.014	0.159	0.159	-0.002	0.001	0.000	0.010	0.088	0.001	0.011	0.010	0.135	0.135
		-0.005	0.006	0.000	0.009	0.096	0.006	0.080	0.009	0.111	0.111	-0.001	0.001	0.000	0.006	0.047	0.001	0.005	0.005	0.057	0.057

(Continued)

(10 of 15 sheets)

Table A-6 (Continued)

Row	Loca- tion	Vertical Pressure, Psi, at Indicated Cells										Rebound									
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
8	E	1.02	0.73	0.00	0.24	0.00	2.48	1.48	-0.61	0.70	-0.47	0.83	0.85	0.00	0.24	0.00	3.05	1.59	-0.41	0.79	-0.19
	T	2.03	1.34	0.26	0.48	0.00	4.29	2.43	0.00	1.75	-0.47	1.84	1.46	0.26	0.48	0.00	4.86	2.54	1.02	1.84	-0.19
	H	1.57	1.46	0.78	0.71	0.00	4.36	2.74	0.51	2.53	-0.17	1.38	1.58	0.78	0.71	0.00	4.63	2.85	1.53	2.62	-0.19
	T	1.11	1.46	1.03	0.95	0.00	2.82	2.74	0.61	2.36	-0.57	0.92	1.58	1.03	0.95	0.00	3.39	2.85	1.63	2.45	-0.39
	J	0.74	1.21	1.03	1.07	0.00	1.35	2.53	0.61	3.67	-0.47	0.55	1.53	1.03	1.07	0.00	2.13	2.84	1.63	3.76	-0.19
2	K	0.37	0.97	0.35	0.95	-0.17	0.22	1.90	-0.21	3.58	-0.66	0.18	1.09	0.35	0.95	-0.17	0.79	2.01	-0.81	3.67	0.00
	E	0.93	0.73	0.17	0.24	-0.17	2.49	1.58	0.00	0.87	0.00	0.83	0.73	0.08	0.12	-0.17	2.37	1.58	-0.30	0.96	0.09
	G	0.65	0.98	0.35	0.48	-0.17	2.37	2.11	1.53	1.83	0.00	0.55	0.98	0.26	0.36	-0.17	2.23	2.11	1.23	1.92	0.09
	H	0.56	0.98	0.60	0.60	-0.17	1.70	2.11	1.83	2.27	0.00	0.46	0.98	0.51	0.48	-0.17	1.58	2.11	1.53	2.30	0.09
	I	0.37	0.86	0.35	0.60	-0.17	0.91	1.90	1.22	2.35	0.10	0.27	0.86	0.26	0.48	-0.00	0.79	1.90	0.92	2.45	0.19
K	J	0.28	0.73	0.35	0.71	0.34	0.57	1.58	0.81	2.18	1.03	0.18	0.73	0.26	0.59	0.00	0.45	1.58	0.51	2.27	1.12
	K	0.19	0.49	0.10	0.60	0.34	0.34	1.16	-0.61	1.66	0.10	0.09	0.49	0.17	0.48	0.00	0.22	1.16	-0.31	1.75	0.19

Row	Loca- tion	Vertical Deflection, in., at Indicated Places										Rebound									
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
8	E	0.340	0.062	0.000	0.048	-0.012	0.048	0.063	0.005	-0.006	0.006	0.008	0.059	0.000	0.008	-0.014	0.048	0.058	0.002	-0.012	0.002
	G	0.025	0.054	0.000	0.041	-0.004	0.041	0.104	0.013	0.035	0.035	0.043	0.051	0.000	0.014	-0.004	0.059	0.099	0.010	-0.093	0.003
	H	0.011	0.036	0.000	0.027	0.014	0.027	0.124	0.018	0.033	0.033	0.029	0.033	0.000	0.021	0.012	0.025	0.119	0.015	0.015	0.015
	I	-0.001	0.023	0.000	0.028	0.053	0.017	0.108	0.022	0.039	0.039	-0.017	0.020	0.000	0.006	0.051	0.025	0.103	0.019	0.041	0.041
	J	-0.009	0.014	0.000	0.030	-0.001	-0.010	0.069	0.015	0.091	0.091	-0.009	0.011	0.000	0.008	-0.003	-0.008	0.064	0.012	0.073	0.073
2	K	-0.140	0.009	0.000	0.027	0.114	0.006	0.037	0.020	0.106	0.106	-0.004	0.006	0.000	0.005	0.112	0.004	0.034	0.017	0.088	0.088
	E	0.024	0.046	0.000	0.007	0.000	0.005	0.112	0.010	-0.015	-0.015	0.026	0.046	0.000	0.009	-0.003	0.061	0.106	0.007	-0.017	-0.017
	G	0.009	0.022	0.000	0.021	0.029	0.033	0.117	0.044	0.030	0.030	0.011	0.022	0.000	0.000	0.076	0.039	0.143	0.041	0.028	0.028
	H	0.005	0.013	0.000	0.023	0.040	0.022	0.124	0.028	0.070	0.070	0.007	0.013	0.000	0.002	0.117	0.039	0.143	0.041	0.028	0.028
	I	0.004	0.007	0.000	0.024	0.059	0.014	0.073	0.029	0.113	0.113	0.006	0.007	0.000	0.003	0.056	0.010	0.079	0.019	0.011	0.011
K	J	0.001	0.003	0.000	0.020	0.072	0.009	0.168	0.025	0.132	0.132	0.002	0.003	0.000	0.003	0.099	0.005	0.164	0.022	0.030	0.030
	K	0.000	0.001	0.000	0.014	0.077	0.007	0.023	0.018	0.156	0.156	0.002	0.001	0.000	0.003	0.074	0.003	0.019	0.005	0.015	0.015

Table A-6 (Continued)

Row	Load Location	Vertical Pressure, psi, at Indicated Cells																				
		Total										Rebound										
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	
9	1	E	0.92	0.73	0.00	0.24	0.00	2.03	1.47	-0.11	0.61	-0.19	0.43	0.73	-0.17	0.36	-0.18	2.15	1.47	-0.20	0.87	-0.29
	G	1.48	1.22	0.18	0.36	0.00	3.61	2.32	0.30	1.40	-0.19	1.39	1.22	0.35	0.48	-0.18	3.73	2.32	0.71	1.66	-0.28	
	H	1.29	1.34	0.35	0.48	0.18	3.38	2.53	0.81	2.01	-0.19	1.20	1.34	0.52	0.60	0.00	3.50	2.53	1.22	2.27	-0.26	
	I	0.83	1.22	0.78	0.71	0.00	2.25	2.42	1.22	2.62	-0.19	0.74	1.22	0.55	0.93	-0.18	2.37	2.42	1.63	2.88	-0.28	
	J	0.55	1.22	0.43	0.71	0.00	1.12	2.32	1.01	2.97	-0.19	0.46	1.22	0.60	0.83	-0.18	1.24	2.32	1.42	2.23	-0.24	
9	2	K	0.37	0.98	0.18	0.83	0.18	0.56	2.11	1.63	2.39	-0.37	0.28	0.98	0.35	0.59	0.00	0.68	2.11	1.42	3.15	-0.10
	E	0.74	0.86	0.00	0.23	-0.18	2.15	1.48	-0.51	0.88	-0.56	0.74	0.73	0.00	0.23	-0.18	2.15	1.48	-0.10	0.05	-0.84	
	G	0.55	1.10	0.17	0.35	0.00	1.92	2.01	-0.71	1.75	-0.75	0.55	0.97	-0.17	0.00	0.00	1.92	2.01	-1.32	1.92	-1.03	
	H	0.37	0.98	0.35	0.47	0.00	1.24	2.01	1.93	2.10	-0.56	0.37	0.86	0.35	0.47	0.00	1.24	2.01	2.54	2.27	-0.84	
	I	0.28	0.86	0.35	0.47	0.00	0.68	1.80	0.71	2.27	-0.28	0.26	0.73	0.35	0.47	0.00	0.68	1.80	1.32	2.44	-0.56	
	J	0.18	0.96	0.26	0.47	0.17	0.45	1.48	0.20	2.01	1.41	0.18	0.73	0.26	0.47	0.17	0.45	1.48	0.81	2.18	1.13	
	K	0.09	0.61	-0.17	0.47	0.00	0.23	1.16	-0.10	1.57	0.56	0.09	0.48	-0.17	0.47	0.00	0.23	1.16	-0.51	1.74	0.26	

Row	Load Location	Vertical Reflection, psi, at Indicated Joints										Rebound									
		Total										Total									
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
9	1	E	0.035	0.060	0.000	0.005	-0.003	0.799	0.072	0.006	-0.002	0.041	0.055	0.000	0.002	-0.044	0.554	0.057	0.002	-0.056	-0.056
		G	0.029	0.056	0.000	0.016	-0.010	0.055	0.131	0.015	-0.008	0.035	0.051	0.000	0.013	-0.039	0.050	0.116	0.011	-0.046	-0.046
		H	0.019	0.040	0.000	0.022	-0.025	0.040	0.154	0.023	-0.003	0.025	0.035	0.000	0.019	-0.024	0.035	0.139	0.019	-0.028	-0.028
		I	0.010	0.026	0.000	0.027	-0.061	0.026	0.143	0.026	-0.067	0.016	0.021	0.000	0.024	-0.012	0.021	0.128	0.022	-0.013	-0.013
		J	0.003	0.017	0.000	0.030	-0.133	0.017	0.050	0.028	0.152	0.009	0.012	0.000	0.027	0.064	0.012	0.800	0.024	0.096	0.096
		K	0.000	0.012	0.000	0.028	-0.135	0.011	0.058	0.026	0.151	0.006	0.007	0.000	0.025	0.036	0.006	0.043	0.022	0.097	0.097
9	2	E	0.037	0.056	0.000	0.008	0.003	0.070	0.154	0.010	-0.005	0.024	0.035	0.000	0.009	0.000	0.074	0.110	0.006	-0.017	-0.017
		G	0.024	0.018	0.000	0.017	0.019	0.033	0.191	0.025	0.042	0.011	0.017	0.000	0.015	0.016	0.033	0.143	0.021	0.020	0.020
		H	0.019	0.010	0.000	0.020	0.036	0.025	0.168	0.029	0.091	0.004	0.009	0.000	0.018	0.033	0.019	0.120	0.025	0.019	0.019
		I	0.016	0.005	0.000	0.020	0.049	0.017	0.122	0.030	0.129	0.005	0.004	0.000	0.018	0.044	0.011	0.074	0.026	0.026	0.026
		J	0.014	0.002	0.000	0.017	0.059	0.012	0.065	0.026	0.158	0.001	0.004	0.000	0.018	0.044	0.011	0.074	0.026	0.026	0.026
		K	0.012	0.001	0.000	0.013	0.056	0.009	0.068	0.020	0.17	-0.003	0.000	0.000	0.011	0.055	0.003	0.020	0.016	0.016	0.016

(Continued)

(12 of 15 sheets)

Table A-6 (Continued)

Row	Loca- tion	Vertical Pressure, Psi, at Indicated Cells									
		Total					Rebound				
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
10	1	E	0.65	0.61	0.09	0.24	-0.17	1.47	1.16	-0.21	0.61
		G	1.02	0.86	0.17	0.36	-0.17	2.82	1.90	-0.10	1.14
		H	0.83	0.98	0.35	0.36	-0.17	2.60	2.11	0.61	1.49
		I	0.65	0.98	0.35	0.60	-0.17	1.81	2.11	1.83	2.18
		J	0.46	0.98	0.43	0.60	-0.17	1.13	1.90	1.42	2.35
		K	0.10	0.73	0.35	0.71	-0.17	0.57	1.69	0.92	2.27
2		E	0.00	-0.37	-0.43	-0.48	-0.52	1.47	0.64	12.32	0.26
		G	0.00	-0.25	-0.34	-0.24	-0.52	1.24	1.06	12.53	0.96
		H	-0.18	-0.25	-0.26	-0.24	-0.52	0.68	1.06	13.75	1.31
		I	-0.18	-0.25	-0.26	-0.24	-0.35	0.34	0.85	12.32	1.40
		J	-0.28	-0.25	-0.26	-0.24	-0.35	0.70	0.64	11.30	1.22
		K	-0.57	-0.49	-0.34	-0.24	-0.35	-0.4	0.21	11.30	0.88

Row	Loca- tion	Vertical Reflection, ft., at Indicated Gages									
		Total					Rebound				
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
10	1	E	0.028	0.045	0.000	0.003	-0.002	0.062	0.072	0.004	-0.018
		G	0.019	0.039	0.000	0.012	0.004	0.057	0.126	0.015	-0.007
		H	0.012	0.027	0.000	0.017	0.014	0.040	0.114	0.021	0.011
		I	0.006	0.015	0.000	0.022	0.033	0.025	0.133	0.127	0.054
		J	0.006	0.008	0.000	0.024	0.055	0.016	0.088	0.089	0.106
		K	0.002	0.004	0.000	0.021	0.067	0.010	0.048	0.026	0.124
2		E	0.012	0.026	0.000	0.007	0.001	0.064	0.137	0.012	-0.003
		G	0.004	0.013	0.000	0.014	0.015	0.036	0.165	0.023	0.010
		H	0.000	0.007	0.000	0.017	0.030	0.023	0.154	0.028	0.098
		I	-0.002	0.004	0.000	0.017	0.041	0.016	0.163	0.009	0.135
		J	-0.003	0.001	0.000	0.014	0.048	0.011	0.073	0.024	0.157
		K	-0.004	0.000	0.000	0.010	0.045	0.008	0.056	0.018	0.183

(Continued)

Table A-6 (Continued)

Row	Loca- tion	Vertical Pressure, psi, at Indicated Cells									
		Total					Rebound				
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
11	1	B	0.18	0.37	0.00	0.00	0.34	-0.31	0.35	-0.19	-0.19
		C	0.28	0.61	0.00	0.00	0.68	-0.61	0.44	-0.37	-0.37
		D	0.37	0.61	0.00	0.00	0.91	-0.41	0.53	-0.37	-0.37
		E	0.46	0.61	0.00	0.00	1.13	-0.51	0.53	-0.37	-0.37
		F	0.65	0.86	0.00	0.23	1.92	-1.44	0.79	-0.56	-0.56
		G	0.74	0.86	0.09	0.23	2.49	-1.80	1.22	-0.56	-0.56
		H	0.65	1.10	0.47	0.23	2.15	-1.90	1.57	0.56	0.56
		I	0.46	0.98	0.35	0.17	1.36	-2.85	1.73	2.10	-0.75
		J	0.37	0.92	0.35	0.17	0.91	1.90	1.02	2.27	-0.75
		K	0.18	0.86	0.26	0.47	0.45	1.48	0.41	2.10	9.75
		L	0.18	1.71	+0.17	0.47	0.17	1.37	0.10	1.92	1.41
		M	0.09	0.61	+0.17	0.47	0.23	1.16	-0.10	1.66	0.47
		N	0.00	0.49	+0.17	0.23	0.00	0.85	-0.41	1.14	0.38

Vertical Reflection, in., at Indicated Gages

Row	Loca- tion	Total									
		Total					Rebound				
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
11	1	B	+0.010	0.002	0.000	0.002	0.005	0.040	+0.042	+0.002	+0.008
		C	0.017	0.030	0.000	0.003	0.002	0.055	0.069	+0.003	+0.004
		D	0.026	0.034	0.000	0.003	0.002	0.062	0.084	+0.004	+0.003
		E	0.059	0.035	0.000	0.004	0.002	0.067	0.107	0.005	+0.003
		F	0.040	0.037	0.000	0.007	0.002	0.071	0.148	0.009	+0.004
		G	0.032	0.030	0.000	0.011	0.007	0.061	0.170	0.015	+0.012
		H	0.026	0.021	0.000	0.016	0.016	0.044	0.186	0.022	+0.033
		I	0.020	0.011	0.000	0.020	0.033	0.027	0.183	0.026	0.080
		J	0.017	0.007	0.000	0.020	0.045	0.019	0.134	0.030	0.120
		K	0.014	0.003	0.000	0.018	0.057	0.013	0.095	0.027	0.147
		L	0.013	0.002	0.000	0.016	0.061	0.011	0.080	0.017	0.167
		M	0.012	0.001	0.000	0.014	0.060	0.010	0.072	0.021	0.175
		N	0.011	0.000	0.000	0.009	0.046	0.008	0.061	0.015	0.147

(Continued)

(14 of 15 sheets)

Table A-6(Concluded)

Row	Loca- tion	Vertical Pressure, psi, at Indicated Cells									
		Total					Rebound				
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
11	2	B	0.09	0.49	0.00	0.00	0.45	0.63	-0.20	0.26	-0.09
		C	0.18	0.37	+0.09	0.00	0.79	0.63	-0.10	0.26	-0.09
		D	0.18	0.49	+0.09	0.00	1.01	0.84	-0.10	0.43	-0.09
		E	0.18	0.49	0.00	0.00	2.13	0.95	-0.10	0.43	-0.09
		F	0.18	0.49	+0.09	0.00	2.35	1.16	0.00	0.70	-0.09
		G	0.18	0.61	+0.09	0.00	1.01	1.26	0.20	0.96	-0.09
		H	0.27	0.61	0.17	0.12	0.68	1.16	0.51	1.13	-0.09
		I	0.27	0.49	0.17	0.12	0.45	1.05	0.20	1.13	-0.19
		J	0.00	0.49	0.17	0.12	0.22	0.84	0.10	1.05	-0.37
		K	0.00	0.37	0.17	0.00	0.11	0.63	0.00	0.87	-0.37
		L	0.00	0.24	0.17	0.12	0.11	0.63	0.00	0.70	-0.26
		M	0.00	0.24	0.17	0.00	0.11	0.42	0.00	0.52	-0.26
		N	-0.10	0.24	0.09	0.00	0.11	0.21	0.00	0.35	-0.26

Table A-6(Continued)

Row	Loca- tion	Vertical Deflection, in., at Indicated Gages									
		Total					Rebound				
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	
11	2	B	0.009	0.017	0.000	0.001	-0.005	0.051	0.031	0.002	-0.006
		C	0.010	0.019	0.000	0.002	-0.006	0.059	0.075	0.004	-0.007
		D	0.009	0.019	0.000	0.003	-0.005	0.061	0.094	0.006	-0.006
		E	0.008	0.017	0.000	0.005	-0.004	0.060	0.106	0.009	-0.004
		F	0.005	0.013	0.000	0.007	-0.001	0.050	0.124	0.014	+0.004
		G	0.003	0.008	0.000	0.010	+0.006	0.032	0.140	0.020	+0.026
		H	0.001	0.003	0.000	0.011	+0.017	0.019	0.110	0.024	0.102
		I	-0.001	0.000	0.000	0.011	+0.025	0.012	0.067	0.024	0.143
		J	-0.002	-0.001	0.000	0.009	+0.030	0.008	0.036	0.020	0.151
		K	-0.002	-0.002	0.000	0.006	+0.026	0.005	0.018	0.014	0.199
		L	-0.003	-0.003	0.000	0.005	0.022	0.004	0.011	0.011	0.179
		M	-0.003	-0.003	0.000	0.003	0.017	0.003	0.012	0.008	0.148
		N	-0.003	-0.003	0.000	0.001	0.005	0.003	0.009	0.004	0.102

Table A-7
Multiple-Wheel Heavy Gear Load Flexible Pavement Test, Static Instrumentation Loading Data
Item 4; Load Condition: 30 kips per wheel, twin tandem, 100 psi

Row	Load Location	Vertical Pressure, psi, at Indicated Cells										Rebound										
		P ₁	P ₂	P ₃	P ₄	P ₅	Total	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
1	1	A	0.00	2.10	-0.10	1.20	0.00	0.00	1.72	-0.10	0.86	0.21	0.00	1.43	-0.87	0.60	-0.29	-0.18	1.72	0.80	0.78	0.31
		B	0.00	3.24	0.66	1.67	0.00	0.00	2.98	-0.30	1.12	0.00	0.00	2.57	-0.11	1.07	-0.29	-0.18	2.98	0.60	1.04	0.10
		C	0.00	4.86	2.95	2.15	0.39	-0.36	4.36	-0.90	1.55	0.21	0.00	4.19	2.18	1.55	0.10	-0.54	4.36	0.00	1.47	0.31
		D	0.00	5.72	5.56	2.63	0.58	-0.36	4.93	-1.10	1.81	0.21	0.00	5.05	4.79	2.03	0.29	-0.54	4.93	-0.20	1.73	0.31
		E	0.00	6.29	9.92	3.11	0.97	-0.18	5.50	-0.80	2.15	0.21	0.00	5.62	9.15	2.51	0.68	-0.36	5.50	0.10	2.07	0.31
		F	0.00	7.24	13.51	4.31	3.32	0.00	6.19	0.40	3.01	0.72	0.00	6.57	12.74	3.71	3.03	-0.18	6.19	1.30	2.93	0.82
		G	0.00	7.05	12.97	5.38	7.43	-0.36	5.85	-0.10	3.79	1.95	0.00	6.38	12.20	4.78	7.14	-0.54	5.85	0.80	3.71	2.05
		H	0.00	5.72	18.63	6.10	10.17	-0.18	4.58	1.10	4.30	3.68	0.00	5.05	17.86	5.50	9.88	-0.36	4.58	2.00	4.22	3.18
		I	0.00	3.62	11.44	6.10	11.73	-0.18	2.86	0.10	4.39	3.69	0.00	2.95	10.67	5.50	11.44	-0.36	2.86	1.00	4.31	3.79
		J	0.00	2.48	4.47	5.50	13.01	-0.18	1.83	-1.70	3.96	4.31	0.00	1.81	3.70	4.90	12.72	-0.36	1.83	-0.80	3.88	4.41
		K	0.20	1.43	2.07	4.43	9.19	-0.18	0.91	-2.30	3.18	2.87	0.20	0.76	1.30	3.83	8.90	-0.36	0.91	-1.40	3.10	2.97
		L	0.00	1.24	1.64	3.83	6.55	-0.18	0.57	-2.30	2.75	1.85	0.00	0.57	0.87	3.23	6.26	-0.36	0.57	-1.40	2.67	1.95
		M	0.00	1.14	1.42	3.23	4.50	-0.18	0.35	-2.49	2.24	1.13	0.00	0.47	0.65	2.63	4.21	-0.36	0.34	-1.59	2.16	1.23
		N	0.00	0.86	1.20	2.39	2.15	-0.36	0.00	-2.50	1.55	0.21	0.00	0.19	0.43	1.79	1.86	-0.54	0.00	-1.60	1.47	0.31

Row	Load Location	Vertical Deflection, in., at Indicated Gages										Rebound									
		D ₁	D ₂	D ₃	D ₄	Total	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
1	1	A	0.015	0.007	0.000	0.001	0.006	0.003	0.000	0.000	0.000	0.017	0.021	0.004	0.009	0.013	0.008	0.001	0.000	0.004	
		B	0.010	0.016	0.002	0.000	0.004	0.006	0.000	0.000	0.000	0.012	0.030	0.006	0.008	0.011	0.011	0.001	0.000	0.004	
		C	0.006	0.028	0.003	0.002	0.003	0.009	0.001	0.000	-0.001	0.008	0.042	0.007	0.010	0.010	0.009	0.014	0.002	0.000	0.003
		D	0.006	0.041	0.004	0.003	0.002	0.010	0.001	0.000	-0.001	0.008	0.055	0.008	0.011	0.009	0.015	0.002	0.000	0.003	
		E	0.006	0.048	0.006	0.004	0.002	0.010	0.001	0.000	-0.001	0.008	0.062	0.010	0.012	0.009	0.015	0.002	0.000	0.003	
		F	0.007	0.036	0.007	0.009	0.003	0.009	0.002	0.000	-0.001	0.009	0.050	0.011	0.017	0.010	0.014	0.003	0.000	0.003	
		G	0.013	0.026	0.008	0.017	0.007	0.006	0.002	0.000	0.001	0.015	0.040	0.012	0.025	0.014	0.011	0.003	0.000	0.005	
		H	0.023	0.016	0.008	0.027	0.012	0.003	0.002	0.000	0.002	0.025	0.030	0.012	0.035	0.019	0.008	0.003	0.000	0.006	
		I	0.040	0.005	0.005	0.035	0.021	-0.001	0.002	0.000	0.005	0.042	0.019	0.009	0.043	0.038	0.003	0.003	0.000	0.009	
		J	0.054	-0.002	0.002	0.030	0.028	-0.002	0.001	0.000	0.006	0.056	0.012	0.006	0.038	0.035	0.003	0.002	0.000	0.010	
		K	0.066	-0.006	0.000	0.022	0.033	-0.004	0.001	0.000	0.007	0.068	0.008	0.004	0.030	0.040	0.001	0.002	0.000	0.011	
		L	0.071	-0.008	-0.001	0.017	0.033	-0.004	0.001	0.000	0.007	0.073	0.006	0.003	0.025	0.040	0.001	0.002	0.000	0.011	
		M	0.072	-0.010	-0.002	0.012	0.031	-0.005	0.000	0.000	0.006	0.074	0.004	0.002	0.020	0.020	0.000	0.000	0.000	0.010	
		N	0.060	-0.011	-0.003	0.005	0.023	-0.005	0.000	0.000	0.004	0.062	0.003	0.001	0.013	0.030	0.000	0.001	0.000	0.008	

(Continued)

(1 of 15 sheets)

Table A-7(Continued)

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells										Rebound									
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
1	2	A	10.85	3.05	1.09	1.43	0.20	46.06	3.90	-0.40	1.38	0.11	11.65	3.24	0.33	1.43	0.20	45.70	3.67	-1.40	1.12	-0.20
		B	0.81	4.58	2.61	1.91	0.19	9.10	5.73	-0.20	1.89	0.31	1.61	4.77	1.85	1.91	0.49	8.74	5.50	-1.20	1.63	0.00
		C	0.41	5.91	14.16	2.87	1.37	3.09	7.34	3.81	2.76	0.62	1.21	6.10	13.40	2.87	1.37	2.73	7.11	2.81	2.50	0.31
		D	19.68	6.29	18.19	3.47	2.16	87.94	7.79	5.31	3.27	0.93	20.18	6.48	17.43	3.47	2.16	87.58	7.56	4.31	3.01	0.62
		E	23.30	6.49	16.77	3.83	3.33	114.16	8.02	5.41	3.70	1.44	24.10	6.68	16.01	3.83	3.33	113.80	7.79	4.41	3.41	1.13
		F	-0.60	6.10	15.68	5.02	7.83	0.91	7.57	5.11	4.82	4.41	0.20	6.29	14.92	5.02	7.83	0.55	7.34	4.11	4.56	4.10
		G	-0.60	4.48	23.96	5.50	10.08	0.73	5.62	7.21	5.34	6.36	0.20	4.67	23.20	5.50	10.08	0.37	5.39	6.21	5.08	6.05
		H	-0.60	2.86	11.33	5.26	11.35	0.73	3.67	4.31	5.34	7.07	0.20	3.05	10.57	5.26	11.35	0.37	3.44	3.31	5.08	6.76
		I	-0.60	1.43	3.48	4.54	12.72	0.54	2.18	1.00	4.74	8.51	0.20	1.62	2.72	4.54	12.72	0.18	1.95	0.00	4.48	8.20
		J	-0.60	0.58	1.74	3.47	7.83	0.36	1.14	0.00	3.79	5.84	0.20	0.77	0.98	3.47	7.83	0.00	0.91	-1.00	3.53	5.53
		K	-0.60	0.19	1.30	2.39	3.52	0.36	0.68	-0.10	2.76	2.57	0.20	0.38	0.54	2.39	3.52	0.00	0.45	-1.10	2.50	2.26
		L	-0.60	0.19	1.30	1.91	2.45	0.36	0.46	-0.20	2.24	1.75	0.20	0.38	0.54	1.91	2.45	0.00	0.23	-1.20	1.98	1.44
		M	-0.60	0.19	1.19	1.55	1.57	0.36	0.34	-0.10	1.89	1.13	0.20	0.38	0.43	1.55	1.57	0.00	0.11	-1.10	1.63	0.82
		N	-0.60	0.00	1.19	0.95	0.88	0.36	-0.23	-0.10	1.20	0.52	0.20	0.19	0.43	0.95	0.88	0.00	0.00	-1.10	0.94	0.21

Table A-7(Continued)

		Vertical Deflection, in., at Indicated Gages																		
		Total									Rebound									
		D ₁	D ₂	P ₃	P ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁	D ₂	P ₃	P ₄	D ₅	P ₆	D ₇	D ₈	P ₉	
1	2	A	0.003	0.047	0.005	0.004	-0.004	0.016	0.002	0.000	0.001	-0.045	0.052	0.005	0.006	-0.007	0.018	0.001	0.000	0.002
		B	0.000	0.061	0.008	0.006	0.006	0.021	0.003	0.000	0.001	-0.046	0.066	0.008	0.008	0.003	0.023	0.002	0.000	0.002
		C	-0.002	0.069	0.011	0.011	0.006	0.023	0.004	0.000	0.001	-0.050	0.074	0.011	0.013	0.003	0.025	0.003	0.000	0.002
		D	-0.002	0.070	0.013	0.016	0.007	0.022	0.004	0.000	0.001	-0.050	0.075	0.013	0.018	0.004	0.024	0.003	0.000	0.002
		E	0.000	0.067	0.015	0.021	0.008	0.021	0.005	0.000	0.002	-0.048	0.072	0.015	0.023	0.005	0.023	0.004	0.000	0.003
		F	0.010	0.052	0.017	0.036	0.016	0.015	0.005	0.000	0.004	-0.038	0.057	0.017	0.038	0.013	0.017	0.004	0.000	0.005
		G	0.006	0.056	0.016	0.049	0.027	0.016	0.005	0.000	0.008	-0.022	0.041	0.016	0.051	0.024	0.012	0.004	0.000	0.009
		H	0.065	0.020	0.013	0.058	0.041	0.005	0.005	0.000	0.012	0.017	0.025	0.013	0.060	0.038	0.007	0.004	0.000	0.013
		I	0.130	0.010	0.009	0.056	0.055	0.002	0.005	0.000	0.016	0.082	0.015	0.009	0.058	0.052	0.004	0.004	0.000	0.017
		J	0.133	0.004	0.006	0.044	0.052	0.000	0.004	0.000	0.018	0.085	0.049	0.006	0.046	0.059	0.002	0.003	0.000	0.019
		K	0.203	0.000	0.003	0.029	0.059	-0.002	0.004	0.000	0.016	0.155	0.005	0.003	0.031	0.056	0.000	0.003	0.000	0.017
		L	0.182	-0.003	0.002	0.021	0.054	-0.002	0.004	0.000	0.014	0.134	0.002	0.002	0.023	0.051	0.000	0.003	0.000	0.015
		M	0.151	-0.004	0.001	0.015	0.047	-0.003	0.003	0.000	0.012	0.103	0.001	0.001	0.017	0.044	-0.001	0.002	0.000	0.013
		N	0.103	-0.005	0.000	0.006	0.031	-0.003	0.002	0.000	0.007	0.055	0.000	0.000	0.008	0.038	-0.001	0.001	0.000	0.008

(Continued)

(2 of 15 sheets)

Table A-1 (Continued)

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells									
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
2	1	E	0.00	5.81	10.15	2.87	1.27	-0.18	6.42	2.00	2.50	0.51
		F	4.42	6.96	17.43	3.95	2.84	12.93	7.34	4.21	3.36	0.92
		G	0.20	6.86	13.94	5.02	-0.10	-0.18	7.22	3.41	4.31	2.97
		H	0.20	5.34	22.66	5.74	10.07	-0.18	5.73	5.61	4.91	5.02
		I	0.20	3.33	15.03	5.74	11.64	-0.18	3.78	4.21	5.00	5.74
	2	K	0.20	1.05	2.61	3.95	9.68	-0.18	1.37	0.00	3.62	5.43
		E	0.00	5.24	6.87	3.23	2.64	4.37	7.69	4.00	3.62	1.64
		F	0.00	4.95	6.76	3.95	5.68	0.00	7.46	4.40	4.65	4.41
		G	0.00	3.62	10.57	4.31	7.34	0.18	5.62	5.71	5.25	6.46
		H	0.00	2.38	4.04	4.19	8.42	0.18	3.56	3.10	5.25	7.58
		I	0.00	1.23	0.22	3.47	8.90	0.18	1.95	0.30	4.56	8.61
		K	0.00	0.28	-0.87	1.92	2.45	0.18	0.69	-0.60	2.67	2.67
	Total	P ₁	-0.20	5.72	9.15	2.75	0.98	-0.18	6.19	0.80	2.24	0.20
		P ₂	4.22	6.87	16.13	3.83	2.55	12.93	7.11	3.01	3.10	0.61
		P ₃	0.00	6.77	12.64	4.90	-0.39	-0.18	6.99	2.21	4.05	2.66
		P ₄	0.00	5.25	21.36	5.62	9.72	-0.18	5.50	4.41	4.65	4.71
		P ₅	0.00	3.24	13.73	5.62	11.35	-0.18	3.55	3.01	4.74	5.43
	Rebound	P ₆	0.00	0.96	1.31	3.83	9.39	-0.18	1.14	-1.20	3.36	5.12
		P ₇	0.00	5.24	7.19	3.11	2.73	4.37	7.57	4.20	3.53	1.54
		P ₈	0.00	4.95	7.08	3.83	5.77	0.00	7.34	4.60	4.56	4.31
		P ₉	0.00	3.62	10.89	4.19	7.43	0.18	5.50	5.91	5.16	6.36
		P ₁₀	0.00	2.38	4.36	4.07	8.51	0.18	3.44	3.30	5.16	7.48
		I	0.00	1.23	0.54	3.35	8.99	0.18	1.83	0.50	4.47	8.51
		K	0.00	0.28	-0.55	1.80	2.54	0.18	0.57	-0.40	2.58	2.57
		Total	-0.20	5.72	9.15	2.75	0.98	-0.18	6.19	0.80	2.24	0.20
		P ₂	4.22	6.87	16.13	3.83	2.55	12.93	7.11	3.01	3.10	0.61
		P ₃	0.00	6.77	12.64	4.90	-0.39	-0.18	6.99	2.21	4.05	2.66
		P ₄	0.00	5.25	21.36	5.62	9.72	-0.18	5.50	4.41	4.65	4.71
		P ₅	0.00	3.24	13.73	5.62	11.35	-0.18	3.55	3.01	4.74	5.43
		P ₆	0.00	0.96	1.31	3.83	9.39	-0.18	1.14	-1.20	3.36	5.12
		P ₇	0.00	5.24	7.19	3.11	2.73	4.37	7.57	4.20	3.53	1.54
		P ₈	0.00	4.95	7.08	3.83	5.77	0.00	7.34	4.60	4.56	4.31
		P ₉	0.00	3.62	10.89	4.19	7.43	0.18	5.50	5.91	5.16	6.36

Row	Load Point	Location	Vertical Deflection, in., at Indicated Gages									
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
2	1	E	0.032	0.055	0.011	0.010	0.004	0.017	0.003	0.000	0.001	0.001
		F	0.032	0.050	0.012	0.016	0.006	0.015	0.004	0.000	0.001	0.001
		G	0.039	0.038	0.014	0.027	0.011	0.011	0.004	0.000	0.003	0.003
		H	0.052	0.024	0.013	0.039	0.020	0.007	0.004	0.000	0.006	0.006
		I	0.072	0.012	0.011	0.047	0.029	0.003	0.004	0.000	0.009	0.009
	2	K	0.107	-0.003	0.004	0.035	0.047	-0.001	0.003	0.000	0.014	0.014
		E	-0.004	0.084	0.021	0.030	0.011	0.028	0.005	0.000	0.003	0.003
		F	0.006	0.067	0.025	0.054	0.021	0.021	0.006	0.000	0.007	0.007
		G	0.034	0.045	0.025	0.072	0.037	0.014	0.007	0.000	0.012	0.012
		H	0.061	0.025	0.021	0.085	0.058	0.007	0.006	0.000	0.019	0.019
		I	0.142	0.010	0.014	0.086	0.078	0.002	0.006	0.000	0.026	0.026
		K	0.189	-0.001	0.006	0.048	0.086	-0.001	0.004	0.000	0.025	0.025
		Total	0.003	0.066	0.011	0.012	0.007	0.017	0.003	0.000	0.002	0.002
		P ₂	0.003	0.061	0.012	0.018	0.009	0.014	0.004	0.000	0.002	0.002
		P ₃	0.010	0.049	0.014	0.029	0.014	0.014	0.004	0.000	0.004	0.004
		P ₄	0.023	0.035	0.013	0.041	0.023	0.010	0.004	0.000	0.007	0.007
		P ₅	0.043	0.023	0.011	0.049	0.032	0.006	0.004	0.000	0.010	0.010
		P ₆	0.078	0.008	0.004	0.037	0.008	0.002	0.003	0.000	0.015	0.015
		P ₇	-0.028	0.091	0.020	0.028	0.008	0.031	0.005	0.000	0.004	0.004
		P ₈	-0.018	0.074	0.024	0.052	0.018	0.024	0.006	0.000	0.008	0.008
		P ₉	0.010	0.052	0.024	0.070	0.034	0.017	0.007	0.000	0.013	0.013
		P ₁₀	0.057	0.032	0.020	0.083	0.055	0.010	0.006	0.000	0.020	0.020
		P ₁₁	0.118	0.017	0.013	0.084	0.075	0.005	0.006	0.000	0.027	0.027
		P ₁₂	0.165	0.006	0.005	0.046	0.083	0.002	0.004	0.000	0.026	0.026
		P ₁₃	0.003	0.066	0.011	0.012	0.007	0.017	0.003	0.000	0.002	0.002
		P ₁₄	0.003	0.061	0.012	0.018	0.009	0.014	0.004	0.000	0.002	0.002
		P ₁₅	0.010	0.049	0.014	0.029	0.014	0.014	0.004	0.000	0.004	0.004
		P ₁₆	0.023	0.035	0.013	0.041	0.023	0.010	0.004	0.000	0.007	0.007
		P ₁₇	0.043	0.023	0.011	0.049	0.032	0.006	0.004	0.000	0.010	0.010
		P ₁₈	0.078	0.008	0.004	0.037	0.008	0.002	0.003	0.000	0.015	0.015
		P ₁₉	-0.028	0.091	0.020	0.028	0.008	0.031	0.005	0.000	0.004	0.004
		P ₂₀	-0.018	0.074	0.024	0.052	0.018	0.024	0.006	0.000	0.008	0.008

(Continued)

(3 of 15 sheets)

Table A-7 (Continued)

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells										
			Total										
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	
3	1	E	0.00	4.76	7.52	2.39	0.97	0.00	6.19	2.80	2.32	0.31	
		F	13.26	5.81	13.62	3.35	2.44	125.64	7.45	5.31	3.56	1.13	
		G	0.00	5.71	9.92	4.19	5.86	0.91	7.34	4.80	4.33	3.49	
		H	0.00	4.38	21.50	4.67	8.31	0.55	5.73	6.81	4.99	5.74	
		I	0.00	2.76	10.13	4.67	9.39	0.55	3.67	4.80	5.08	6.76	
2		K	0.00	0.76	0.77	3.35	8.21	0.55	1.26	0.00	3.70	6.76	
		E	0.00	4.42	3.27	2.75	2.06	-0.19	8.15	3.70	3.61	1.64	
		F	0.00	4.10	3.48	3.47	4.21	-0.37	7.80	4.00	4.82	4.92	
		G	-0.20	2.96	1.36	3.71	5.29	-0.37	5.74	5.10	5.34	6.76	
		H	0.00	1.91	1.03	3.71	6.17	-0.37	3.56	3.20	5.34	7.89	
		I	0.00	0.95	-0.22	2.87	6.17	-0.19	2.07	0.20	4.73	8.81	
		K	0.00	0.10	-1.31	1.56	1.28	-0.19	0.69	-1.00	2.58	2.67	
		Rebound											
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀		
		E	0.00	4.76	7.41	2.27	0.88	-0.19	6.08	2.30	2.15	0.31	
		F	13.26	5.81	13.51	3.23	2.35	125.45	7.34	5.31	3.19	1.13	
		G	0.00	5.71	9.81	4.07	5.77	0.72	7.23	4.80	4.22	3.49	
		H	0.00	4.38	21.79	4.55	8.22	0.36	5.62	6.81	4.82	5.74	
		I	0.00	2.76	10.02	4.55	9.30	0.36	3.56	4.80	4.91	6.76	
		K	0.00	0.76	0.66	3.23	8.12	0.36	1.15	0.00	3.53	6.76	
		E	0.00	4.42	3.71	2.75	2.35	0.18	8.03	4.80	3.27	1.84	
		F	-0.20	4.29	3.92	3.47	4.50	0.00	7.68	5.10	1.48	5.12	
		G	-0.40	3.15	4.80	3.71	5.58	0.00	5.62	6.50	5.00	6.96	
		H	-0.20	2.10	2.07	3.71	6.46	0.00	3.44	4.30	3.00	6.09	
		I	-0.20	1.14	0.22	2.87	6.46	0.18	1.95	1.30	4.39	9.01	
		K	-0.20	0.29	-0.97	1.56	1.57	0.18	0.57	0.10	2.24	2.87	

Vertical Deflection, in., at Indicated Gages																			
Total																			
Rebound																			
	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	
1	E	0.000	0.078	0.013	0.012	0.005	0.041	0.003	0.000	0.001	-0.023	0.082	0.012	0.011	0.005	0.031	0.003	0.000	0.002
	F	0.001	0.076	0.017	0.021	0.008	0.037	0.004	0.000	0.002	-0.022	0.080	0.016	0.020	0.008	0.027	0.004	0.000	0.003
	G	0.012	0.063	0.020	0.037	0.014	0.031	0.005	0.000	0.005	-0.011	0.067	0.019	0.036	0.014	0.021	0.005	0.000	0.006
	H	0.032	0.043	0.020	0.054	0.026	0.024	0.005	0.000	0.009	0.009	0.047	0.019	0.053	0.026	0.014	0.005	0.000	0.010
	I	0.067	0.026	0.017	0.064	0.042	0.019	0.005	0.000	0.012	0.044	0.030	0.016	0.063	0.042	0.009	0.005	0.000	0.014
2	K	0.162	0.005	0.008	0.055	0.056	0.012	0.004	0.000	0.022	0.139	0.009	0.007	0.054	0.068	0.002	0.004	0.000	0.023
	E	0.000	0.134	0.029	0.039	0.015	0.052	0.009	0.000	0.006	0.004	0.114	0.023	0.011	-0.016	0.047	0.007	0.000	0.012
	F	0.011	0.108	0.035	0.076	0.025	0.040	0.011	0.000	0.010	0.015	0.088	0.029	0.048	-0.006	0.035	0.009	0.000	0.006
	G	0.036	0.077	0.035	0.105	0.047	0.028	0.011	0.000	0.018	0.040	0.057	0.029	0.077	0.016	0.023	0.009	0.000	0.014
	H	0.074	0.049	0.031	0.123	0.078	0.018	0.010	0.000	0.027	0.078	0.029	0.025	0.095	0.047	0.013	0.008	0.000	0.023
	I	0.117	0.030	0.023	0.136	0.106	0.011	0.009	0.000	0.037	0.121	0.010	0.017	0.108	0.075	0.006	0.007	0.000	0.033
	K	0.167	0.014	0.011	0.077	0.127	0.004	0.006	0.000	0.036	0.111	-0.006	0.005	0.049	0.096	-0.001	0.004	0.000	0.032

(Continued)

(4 of 15 sheets)

Table 4-7(Continued)

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells									
			Total					Rebound				
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
4	2	E	0.00	3.82	2.61	2.51	1.76	19.49	7.80	5.60	3.79	1.94
		F	0.00	3.63	2.61	3.11	3.03	0.19	7.80	5.40	4.65	4.71
		G	0.00	2.67	2.18	3.35	3.91	0.19	5.96	7.71	5.25	6.86
		H	0.00	1.72	1.09	3.11	4.40	0.37	3.67	4.80	5.34	8.09
		I	0.00	0.96	0.00	2.63	3.91	0.19	2.06	1.70	4.56	9.12
		J	0.00	0.18	-0.55	2.04	2.35	0.19	1.26	1.00	3.62	6.25
		K	0.00	0.20	-0.76	1.44	0.88	0.19	0.80	0.80	2.50	2.87

Row	Load Point	Location	Vertical Reflection, in., at Indicated Gages									
			Total					Rebound				
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
4	2	E	0.005	0.156	0.035	0.046	0.014	0.049	0.011	0.000	0.008	0.008
		F	0.016	0.117	0.041	0.091	0.025	0.038	0.013	0.000	0.013	0.013
		G	0.040	0.080	0.041	0.125	0.049	0.025	0.013	0.000	0.022	0.022
		H	0.089	0.048	0.034	0.146	0.088	0.012	0.011	0.000	0.034	0.034
		I	0.147	0.028	0.025	0.171	0.121	0.003	0.009	0.000	0.045	0.045
		J	0.164	0.016	0.016	0.137	0.140	-0.001	0.007	0.000	0.048	0.048
		K	0.197	0.009	0.01	0.091	0.144	-0.004	-0.015	0.000	0.044	0.044

(Continued)

(5 of 15 sheets)

Table A-7(Continued)

Row	Load Point	Loca- tion	Vertical Pressure, psi, at Indicated Cells										Rebound									
			Total																			
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
5	1	A	0.00	1.24	0.11	0.84	0.30	-0.37	1.95	-0.40	0.86	0.00	-0.20	1.43	0.55	0.84	0.59	0.00	1.83	0.70	0.52	0.20
		B	0.00	2.00	0.33	0.96	0.30	-0.37	3.22	-0.20	1.03	0.00	-0.20	2.19	0.77	0.96	0.59	0.00	3.10	0.90	0.69	0.20
		C	0.00	3.15	1.09	1.44	0.59	-0.19	5.39	0.30	1.72	0.21	-0.20	3.34	1.53	1.44	0.88	0.18	5.27	1.40	1.38	0.41
		D	0.00	3.43	1.31	1.56	0.69	-0.73	6.08	1.00	1.89	0.21	-0.20	3.62	1.75	1.56	0.98	-0.36	5.96	2.10	1.55	0.41
		E	0.00	3.91	2.07	1.92	0.99	-0.55	6.77	2.10	2.32	0.41	-0.20	4.10	2.51	1.92	1.28	-0.18	6.85	3.20	1.98	0.61
		F	0.00	4.48	3.27	2.51	1.77	0.00	7.92	3.70	3.27	1.23	-0.20	4.67	3.71	2.51	2.06	0.37	7.80	4.80	2.93	1.43
		G	0.00	4.19	3.27	3.23	3.82	-0.37	7.92	3.70	4.56	4.31	-0.20	4.38	3.71	3.23	4.11	0.06	7.80	4.80	4.22	4.51
		H	0.00	3.34	4.36	3.71	5.19	-0.37	6.43	4.90	5.16	6.35	-0.20	3.53	4.80	3.71	5.48	0.00	6.31	6.00	4.82	6.55
		I	0.00	2.19	2.61	3.71	5.88	-0.37	4.25	4.20	5.42	7.38	-0.20	2.38	3.05	3.71	6.17	0.00	4.13	5.30	5.08	7.58
		J	0.00	1.14	0.22	3.35	6.56	-0.19	2.41	0.80	4.99	9.02	-0.20	1.33	0.66	3.35	6.85	0.18	2.29	1.90	4.65	9.22
		K	0.00	0.57	-0.76	2.63	4.41	0.00	1.50	-0.60	4.04	7.38	-0.20	0.76	-0.32	2.63	4.70	0.37	1.38	0.50	3.70	7.58
		L	0.00	0.29	-1.09	2.27	3.04	-0.19	1.04	-0.80	3.53	5.12	-0.20	0.48	-0.65	2.27	3.32	0.18	0.92	0.30	3.19	5.32
		M	0.20	0.10	-1.09	1.80	1.87	-0.19	0.81	-0.90	2.92	3.49	0.00	0.29	-0.65	1.80	2.16	0.18	0.69	0.20	2.58	3.69
		N	0.20	-0.09	-1.31	1.20	0.50	-0.37	0.58	-1.00	2.06	1.44	0.00	0.10	-0.87	1.20	0.79	0.00	0.46	0.10	1.72	1.64

Row	Load Point	Loca- tion	Vertical Deflection, in., at Indicated Gages										Rebound									
			Total																			
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
5	1	A	0.010	0.060	0.004	0.010	0.021	0.019	0.032	0.000	0.007		0.014	0.040	-0.002	-0.018	-0.010	0.014	0.000	0.000	0.003	
		B	0.004	0.083	0.006	0.009	0.017	0.028	0.003	0.000	0.006		0.008	0.063	0.000	-0.019	-0.014	0.023	0.001	0.000	0.002	
		C	-0.001	0.113	0.012	0.012	0.012	0.043	0.005	0.000	0.004		0.003	0.093	0.006	-0.016	-0.019	0.038	0.003	0.000	0.000	
		D	-0.002	0.123	0.015	0.015	0.011	0.057	0.005	0.000	0.004		0.002	0.103	0.009	-0.013	-0.020	0.052	0.003	0.000	0.000	
		E	-0.002	0.130	0.019	0.018	0.011	0.066	0.006	0.000	0.004		0.003	0.115	0.020	0.013	-0.010	0.061	0.004	0.000	0.000	
		F	-0.001	0.135	0.026	0.032	0.013	0.054	0.008	0.000	0.005		0.014	0.093	0.028	0.004	-0.018	0.049	0.006	0.000	0.001	
		G	0.010	0.113	0.034	0.068	0.023	0.042	0.010	0.000	0.010		0.030	0.067	0.029	0.009	-0.008	0.037	0.008	0.000	0.006	
		H	0.026	0.087	0.035	0.095	0.039	0.032	0.011	0.000	0.015		0.063	0.037	0.027	0.009	0.036	0.027	0.009	0.000	0.011	
		I	0.059	0.057	0.033	0.117	0.067	0.021	0.010	0.000	0.024		0.111	0.016	0.019	0.107	0.067	0.016	0.008	0.000	0.020	
		J	0.107	0.036	0.025	0.135	0.098	0.013	0.009	-0.002	0.034		0.137	0.002	0.012	0.095	0.089	0.002	0.006	0.000	0.030	
		K	0.133	0.022	0.018	0.123	0.120	0.007	0.008	0.000	0.040		0.152	-0.002	0.009	0.080	0.096	0.001	0.005	0.000	0.036	
		L	0.148	0.018	0.015	0.108	0.127	0.005	0.007	0.000	0.040		0.166	-0.004	0.007	0.063	0.098	0.000	0.004	0.000	0.034	
		M	0.162	0.016	0.013	0.091	0.129	0.005	0.006	0.000	0.038		0.145	-0.008	0.003	0.030	0.083	-0.002	0.003	0.000	0.026	
		N	0.141	0.012	0.009	0.058	0.114	0.003	0.005	0.000	0.030											

(Continued)

(6 of 15 sheets)

Table A-7(Continued)

Row	Load Point	Loca- tion	Vertical Pressure, psi, at Indicated Cells											
			Total					Rebound						
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀		
5	2	A	0.00	1.53	0.32	1.32	0.00	24.21	3.21	0.70	1.12	0.20	1.12	0.20
		B	0.00	2.10	0.76	1.08	0.15	4.00	5.04	1.00	1.64	0.41	1.64	0.41
		C	0.00	2.67	1.41	1.56	0.58	1.82	6.65	5.00	2.50	0.71	2.50	0.71
		D	0.00	2.86	1.85	1.80	0.78	58.81	6.88	6.01	2.85	1.02	2.85	1.02
		E	0.00	2.86	2.39	2.04	1.17	88.85	7.34	5.60	3.54	1.94	3.54	1.94
		F	0.00	2.58	2.72	2.51	2.15	0.91	6.99	5.60	4.40	4.71	5.40	4.71
		G	0.00	1.91	1.85	2.75	2.93	0.91	5.04	7.81	4.91	6.86	7.61	4.91
		H	0.00	1.15	0.98	2.63	3.13	0.73	3.21	4.40	4.91	7.89	4.91	7.89
		I	0.00	0.58	0.32	2.27	2.54	0.73	1.72	1.40	4.22	9.12	1.84	9.12
		J	0.00	0.10	0.00	1.56	1.46	0.54	0.92	0.60	3.19	6.14	1.04	6.14
		K	0.00	-0.09	-0.22	1.03	0.58	0.73	0.34	0.40	2.33	3.07	0.46	2.33
		L	0.00	-0.19	-0.22	0.84	0.39	0.73	0.23	0.40	1.81	1.94	0.35	1.81
		M	0.00	-0.19	-0.33	0.60	0.10	0.73	0.23	0.40	1.37	1.33	0.35	1.47
		N	0.00	-0.28	-0.33	0.36	-0.20	0.36	0.00	0.30	0.87	0.61	0.12	0.87

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Table A-7(Continued)

Vertical Deflection, in., at Indicated Gages																				
		Total					Rebound													
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	
5	2	A	0.064	0.137	0.009	-0.001	0.007	0.054	0.005	0.000	0.009	-0.009	0.099	0.007	-0.010	-0.003	0.063	0.004	0.000	0.010
		B	0.009	0.186	0.018	0.003	0.003	0.072	0.009	0.000	0.007	-0.064	0.148	0.016	-0.006	-0.007	0.061	0.008	0.000	0.008
		C	0.007	0.207	0.030	0.016	0.003	0.083	0.013	0.000	0.007	-0.066	0.169	0.028	-0.007	-0.007	0.092	0.012	0.000	0.008
		D	0.008	0.242	0.036	0.025	0.004	0.083	0.015	0.000	0.008	-0.065	0.204	0.034	-0.006	-0.006	0.092	0.014	0.000	0.009
		E	0.010	0.274	0.044	0.047	0.007	0.078	0.017	0.000	0.010	-0.063	0.236	0.042	-0.038	-0.003	0.087	0.016	0.000	0.011
		F	0.021	0.198	0.050	0.106	0.022	0.061	0.019	0.000	0.018	-0.052	0.160	0.048	0.097	0.012	0.070	0.018	0.000	0.019
		G	0.232	0.141	0.050	0.151	0.053	0.039	0.019	0.000	0.030	0.159	0.103	0.048	0.142	0.043	0.048	0.018	0.000	0.031
		H	0.098	0.104	0.044	0.177	0.039	0.022	0.017	0.000	0.045	0.025	0.066	0.042	0.168	0.089	0.031	0.016	0.000	0.046
		I	0.209	0.082	0.032	0.204	0.114	0.010	0.015	0.000	0.059	0.136	0.044	0.030	0.195	0.124	0.119	0.014	0.000	0.060
		J	0.207	0.067	0.021	0.165	0.157	0.003	0.011	0.000	0.065	0.134	0.029	0.019	0.156	0.147	0.012	0.010	0.000	0.066
		K	0.289	0.060	0.014	0.113	0.167	-0.001	0.009	0.000	0.062	0.216	0.022	0.012	0.104	0.157	0.008	0.008	0.000	0.063
		L	0.285	0.058	0.011	0.090	0.159	-0.003	0.007	0.000	0.057	0.242	0.020	0.009	0.081	0.149	0.006	0.000	0.000	0.058
		M	0.238	0.056	0.010	0.069	0.142	-0.004	0.006	0.000	0.049	0.165	0.018	0.008	0.060	0.132	0.005	0.005	0.000	0.050
		N	0.179	0.054	0.007	0.048	0.099	-0.005	0.004	0.000	0.033	0.106	0.016	0.005	0.039	0.089	0.004	0.003	0.000	0.034

(Continued)

(7 of 15 sheets)

Table A-7 (Continued)

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells									
			Total					Rebound				
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
6	1	E	0.00	2.48	1.20	1.32	0.39	0.18	6.08	3.00	2.16	0.61
		F	0.00	2.86	2.18	2.04	0.98	97.96	7.57	5.81	3.36	1.64
		G	0.00	2.67	2.94	2.39	1.86	1.09	7.22	6.01	4.14	3.89
		H	0.00	2.10	2.07	2.75	2.74	0.73	5.73	7.61	4.83	6.55
		I	0.00	1.34	1.20	2.63	3.13	0.91	3.55	5.10	5.00	7.68
		K	0.00	0.29	0.00	1.56	1.76	0.73	1.03	0.60	5.45	7.07
2	E	-0.80	1.62	1.62	2.29	1.20	0.59	-1.10	5.28	0.90	2.50	1.33
	F	-0.80	1.43	1.43	3.92	1.44	1.07	-1.10	4.82	1.50	3.19	2.66
	G	0.00	1.24	1.24	2.07	1.92	1.96	0.00	3.79	1.60	3.97	4.10
	H	0.00	0.76	0.76	1.31	1.68	2.15	0.00	2.41	0.20	3.88	4.81
	I	0.00	0.29	0.29	0.87	1.44	1.57	0.00	1.15	-0.80	3.36	4.92
	K	0.20	0.09	0.09	0.65	0.72	0.59	0.00	0.12	-1.30	1.73	1.43

Vertical Deflection, in., at Indicated Gages

Row	Load Point	Location	Total									
			Total					Rebound				
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
6	1	E	0.007	0.191	0.025	0.010	0.003	0.081	0.011	0.000	0.007	0.008
		F	0.008	0.273	0.043	0.041	0.005	0.079	0.017	0.000	0.009	0.010
		G	0.017	0.218	0.048	0.087	0.017	0.066	0.019	0.000	0.015	0.016
		H	0.036	0.155	0.051	0.141	0.042	0.045	0.019	0.000	0.026	0.027
		I	0.081	0.111	0.046	0.169	0.089	0.026	0.017	0.000	0.042	0.043
		K	0.209	0.067	0.022	0.175	0.160	0.003	0.011	0.000	0.067	0.068
2	E	0.010	0.202	0.048	0.056	0.160	0.009	0.144	0.025	0.000	0.018	0.019
	F	0.017	0.145	0.056	0.056	0.160	0.009	0.119	0.029	0.000	0.029	0.030
	G	0.032	0.088	0.058	0.058	0.160	0.009	0.084	0.029	0.000	0.049	0.050
	H	0.056	0.050	0.053	0.053	0.203	0.112	0.054	0.026	0.000	0.079	0.080
	I	0.075	0.023	0.038	0.038	0.225	0.151	0.034	0.021	0.000	0.105	0.106
	K	0.094	0.002	0.018	0.018	0.124	0.184	0.016	0.011	0.000	1.210	1.211

(Continued)

(8 of 15 sheets)

Table A-7(Continued)

Row	Loca- tion	Vertical Pressure, psi, at Indicated Cells										Rebound									
		Total																			
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
7	1	0.00	1.05	0.22	0.60	0.20	-0.37	2.64	0.60	0.95	0.41	0.00	1.34	-0.43	0.84	0.39	-0.37	1.98	1.20	1.03	0.72
		0.00	1.43	0.43	0.84	0.20	-0.37	3.79	1.00	1.38	0.41	0.00	1.72	-0.22	1.08	0.39	-0.37	1.13	1.60	1.46	0.72
		0.61	1.43	0.65	0.96	0.30	-0.37	4.25	1.00	1.64	0.61	0.61	1.72	0.00	1.20	0.49	-0.37	1.59	1.60	1.72	0.92
		3.62	1.62	0.76	1.08	0.39	-0.37	4.94	1.20	1.90	0.71	3.62	1.91	0.11	1.32	0.58	-0.37	1.28	1.80	1.98	2.02
		4.02	1.91	1.52	1.20	0.49	-1.10	5.16	1.00	2.33	1.02	4.02	2.20	0.87	1.44	0.68	-1.10	1.50	1.60	2.41	1.33
		-0.80	1.52	4.14	1.44	0.98	-1.10	4.94	1.30	3.02	2.25	-0.80	1.81	3.49	1.68	1.17	-1.10	1.28	1.90	3.10	2.56
		-0.80	1.14	2.29	1.56	1.47	-0.92	3.79	1.60	3.54	3.48	-0.80	1.43	1.64	1.80	1.66	-0.92	4.13	2.20	3.62	3.79
		0.00	0.86	1.52	1.80	2.25	0.00	2.64	0.50	3.97	4.61	0.00	1.15	0.87	2.04	2.44	0.00	2.98	1.10	4.05	4.92
		0.00	0.48	1.09	1.56	1.86	0.00	1.49	-1.80	3.54	5.12	0.00	0.77	0.44	1.80	2.05	0.00	1.83	-1.20	3.62	5.43
		0.00	0.09	0.87	1.20	1.18	0.00	0.69	-1.00	2.85	3.79	0.00	0.38	0.22	1.44	1.37	0.00	1.09	-0.40	2.93	4.10
		0.20	0.09	0.45	0.96	0.78	0.00	0.35	-1.10	2.33	2.66	0.20	0.38	0.00	1.20	0.97	0.00	0.07	-0.50	2.41	2.97
		0.20	0.09	0.65	0.72	0.78	0.00	0.12	-1.20	1.98	1.74	0.20	0.38	0.00	0.96	0.97	0.00	0.46	-0.60	2.06	2.05
		0.00	-0.19	0.54	0.48	0.20	0.00	-0.11	-1.40	1.21	0.61	0.00	0.10	-0.11	0.72	0.39	0.00	0.23	-0.80	1.29	0.92

Vertical Deflection, in., at Indicated Gages

Row	Loca- tion	Total										Rebound									
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	
7	1	0.014	0.093	0.009	0.001	0.009	0.094	0.007	0.000	0.016		0.002	0.110	0.001	-0.033	-0.035	0.056	0.003	0.000	-0.016	
		0.010	0.143	0.018	0.005	0.004	0.122	0.015	0.000	0.013		-0.002	0.160	0.010	-0.029	-0.040	0.094	0.011	0.000	-0.019	
		0.008	0.157	0.023	0.008	0.003	0.131	0.013	0.000	0.012		-0.004	0.174	0.015	-0.026	-0.041	0.103	0.009	0.000	-0.020	
		0.007	0.171	0.030	0.013	0.002	0.140	0.017	0.000	0.012		-0.005	0.188	0.022	-0.021	-0.042	0.112	0.013	0.000	-0.020	
		0.009	0.199	0.044	0.038	0.006	0.146	0.023	0.000	0.015		-0.003	0.216	0.036	0.004	-0.038	0.118	0.019	0.000	-0.017	
		0.015	0.158	0.054	0.000	0.020	0.125	0.028	0.000	0.026		0.003	0.175	0.046	0.066	-0.024	0.097	0.024	0.000	-0.006	
		0.046	0.104	0.058	1.530	0.046	0.095	0.029	0.000	0.411		0.014	0.121	0.050	0.119	0.002	0.052	0.025	0.000	0.009	
		0.070	0.074	0.044	0.223	0.138	0.041	0.023	0.000	0.070		0.034	0.076	0.045	0.156	0.052	0.034	0.023	0.000	0.038	
		0.084	0.014	0.030	0.207	0.167	0.026	0.017	0.000	0.096		0.058	0.051	0.036	0.189	0.094	0.013	0.019	0.000	0.004	
		0.095	0.009	0.025	0.174	0.181	0.021	0.014	0.000	0.122		0.072	0.031	0.022	0.173	0.123	-0.002	0.013	0.000	0.084	
		0.094	0.004	0.020	0.140	0.184	0.018	0.012	0.000	0.122		0.083	0.026	0.017	0.140	0.137	-0.007	0.010	0.000	0.090	
		0.079	-0.001	0.014	0.092	0.167	0.014	0.008	0.000	0.109		0.082	0.021	0.012	0.106	0.140	-0.010	0.008	0.000	0.090	
												0.067	0.016	0.006	0.058	0.123	-0.014	0.004	0.000	0.077	

(Continued)

(9 of 15 sheets)

Table A-7(Continued)

Row	Loca- tion	Vertical Pressure, psi, at Indicated Cells									
		Total					Rebound				
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
7	2	0.00	1.05	0.33	0.72	0.20	-0.18	2.98	0.60	1.12	0.20
		0.00	1.15	0.66	0.96	0.39	-0.18	3.67	0.80	1.55	0.30
		0.00	1.24	0.87	0.96	0.59	0.00	3.79	0.80	1.90	0.41
		0.00	1.15	0.98	1.08	0.59	0.00	3.79	0.80	2.07	0.61
		0.00	1.15	1.31	1.20	0.69	0.18	3.44	1.20	2.59	1.12
		0.00	0.86	0.76	1.20	1.27	0.18	2.52	0.50	2.76	1.84
		0.20	0.58	0.44	1.20	1.37	0.18	1.61	0.00	2.67	2.15
		-4.01	0.38	0.22	0.96	0.98	0.18	0.92	-0.41	2.24	1.84
		0.00	0.19	0.00	0.72	0.78	0.18	0.46	-0.61	1.73	1.12
		0.00	0.00	0.00	0.48	0.39	0.18	0.12	-0.61	1.11	0.41
		0.00	0.00	0.00	0.48	0.39	0.18	0.00	-0.71	0.95	0.20
		0.00	0.00	0.00	0.24	0.30	0.18	0.00	-0.71	0.69	0.00
		0.00	0.00	0.00	0.24	0.20	0.18	-0.11	-0.71	0.35	0.00

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Row	Loca- tion	Vertical Reflection, in., at Indicated Gages									
		Total					Rebound				
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
7	2	0.004	0.168	0.018	0.009	0.006	0.183	0.016	0.000	0.005	0.005
		0.004	0.201	0.032	0.022	0.006	0.215	0.026	0.000	0.006	0.006
		0.005	0.231	0.037	0.032	0.009	0.242	0.030	0.000	0.009	0.009
		0.006	0.259	0.042	0.050	0.012	0.268	0.035	0.000	0.013	0.013
		0.010	0.189	0.048	0.107	0.025	0.198	0.038	0.000	0.027	0.027
		0.019	0.130	0.049	0.156	0.054	0.138	0.039	0.000	0.028	0.028
		0.030	0.091	0.041	0.177	0.097	0.098	0.034	0.000	0.12	0.12
		0.040	0.070	0.031	0.209	0.130	0.075	0.026	0.000	0.132	0.132
		0.050	0.051	0.018	0.169	0.153	0.055	0.018	0.000	0.156	0.156
		0.053	0.049	0.015	0.122	0.161	0.049	0.013	0.000	0.159	0.159
		0.049	0.245	0.012	0.096	0.152	0.046	0.011	0.000	0.150	0.150
		0.041	0.043	0.009	0.077	0.136	0.043	0.009	0.000	0.135	0.135
		0.024	0.041	0.007	0.051	0.094	0.041	0.006	0.000	0.095	0.095

(Continued)

(10 of 15 sheets)

Table A-7(Continued)

Row	Load Location	Vertical Pressure, psi, at Indicated Cells									
		P ₁	P ₂	P ₃	P ₄	Total	P ₅	P ₆	P ₇	P ₈	P ₉
8	1	0.00	1.43	0.65	0.96	0.29	-0.37	4.12	0.60	1.63	0.41
	E	0.00	1.52	1.31	1.20	0.59	-0.37	4.58	0.50	2.32	0.82
	F	0.00	1.43	2.51	1.32	0.88	-0.18	4.47	0.60	2.84	1.44
	G	0.00	1.14	1.42	1.44	1.37	0.00	3.44	0.40	3.18	2.26
	H	0.00	0.76	0.55	1.44	1.66	0.18	2.17	-0.40	3.27	2.87
2	I	0.00	0.09	0.11	0.84	0.88	0.00	0.57	-1.10	2.23	2.05
	K	0.20	0.77	0.66	0.72	0.19	0.37	2.98	0.91	1.72	0.51
	E	0.20	0.67	0.87	0.96	0.78	0.37	2.75	1.41	2.07	0.92
	F	0.20	0.48	0.44	0.96	0.98	0.37	2.07	0.71	2.33	1.23
	G	0.20	0.19	0.33	0.96	1.07	0.37	1.26	0.20	2.15	1.74
	H	0.20	0.10	0.22	0.84	0.88	0.37	0.69	0.00	1.90	1.43
	I	0.00	-0.19	0.00	0.36	0.39	0.00	0.00	-0.30	0.95	0.41
	K										
Rebound											
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
		0.00	0.29	0.76	1.20	0.29	-0.37	4.35	1.80	1.81	0.61
		0.00	0.59	1.42	1.44	0.59	-0.37	4.81	1.70	2.50	1.02
		0.00	0.88	2.62	1.56	0.88	-0.18	4.70	1.80	3.02	1.64
		0.00	1.37	1.53	1.68	1.37	0.00	3.67	1.60	3.36	2.46
		0.00	1.66	0.66	1.68	1.66	0.18	2.40	0.80	3.45	3.07
		0.00	0.19	0.22	1.08	0.68	0.00	0.80	0.10	2.41	2.25
		0.20	0.96	0.66	0.72	0.49	0.00	2.98	3.11	1.81	0.62
		0.20	0.86	0.97	0.96	0.78	0.00	2.75	3.61	2.16	1.03
		0.20	0.67	0.44	0.96	0.98	0.00	2.07	2.91	2.42	1.00
		0.20	0.38	0.33	0.96	1.07	0.00	1.26	2.40	2.24	1.85
		0.20	0.29	0.22	0.84	0.88	0.00	0.69	2.20	1.90	1.54
		0.00	0.00	0.00	0.36	0.39	-0.37	0.00	1.90	1.04	0.52

Row	Load Location	Vertical Deflection, in., at Indicated Joints									
		D ₁	D ₂	D ₃	D ₄	Total	D ₅	D ₆	D ₇	D ₈	D ₉
8	1	0.00	0.196	0.029	0.016	0.004	0.158	0.018	0.000	0.007	0.007
	E	0.002	0.255	0.043	0.043	0.009	0.194	0.027	0.000	0.012	0.012
	F	0.006	0.212	0.051	0.094	0.020	0.161	0.031	0.000	0.022	0.022
	G	0.016	0.151	0.054	1.530	0.045	0.114	0.033	0.000	0.043	0.043
	H	0.032	0.104	0.049	1.810	0.092	0.075	0.025	0.000	0.078	0.078
2	I	0.060	0.067	0.026	1.870	0.154	0.034	0.016	0.000	0.000	1.270
	K	-0.012	0.138	0.034	0.027	-0.008	0.226	0.033	0.000	-0.006	0.000
	E	-0.006	0.098	0.039	0.074	0.004	0.164	0.037	0.000	0.012	0.012
	F	0.002	0.058	0.059	0.108	0.028	0.109	0.037	0.000	0.044	0.044
	G	0.013	0.029	0.034	0.131	0.063	0.071	0.033	0.000	0.088	0.088
	H	0.024	0.011	0.024	0.148	0.068	0.048	0.025	0.000	0.119	0.119
	I	0.026	-0.003	0.008	0.057	0.109	0.025	0.011	0.000	0.115	0.115
	K										
Rebound											
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
		0.025	0.147	0.024	-0.001	-0.004	0.124	0.016	0.000	-0.003	0.000
		0.027	0.206	0.038	0.026	0.001	0.160	0.025	0.000	0.002	0.002
		0.031	0.163	0.046	0.077	0.012	0.127	0.029	0.000	0.012	0.012
		0.041	0.102	0.049	0.136	0.037	0.080	0.031	0.000	0.033	0.033
		0.057	0.057	0.041	0.164	0.084	0.041	0.027	0.000	0.028	0.028
		0.085	0.018	0.021	0.170	0.146	0.000	0.014	0.000	0.117	0.117
		0.077	0.140	0.036	0.040	0.011	0.215	0.035	0.000	0.011	0.011
		0.011	0.100	0.041	0.087	0.023	0.153	0.039	0.000	0.029	0.029
		0.019	0.040	0.041	0.121	0.047	0.096	0.039	0.000	0.061	0.061
		0.030	0.031	0.036	0.144	0.082	0.060	0.035	0.000	0.105	0.105
		0.041	0.013	0.026	0.161	0.107	0.037	0.027	0.000	0.136	0.136
		0.043	-0.006	0.010	0.080	0.128	0.014	0.013	0.000	0.163	0.163

(Continued)

(11 of 15 sheets)

Table A-7 (Continued)

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells									
			Total					Rebound				
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
9	1	E	0.00	1.15	0.44	0.84	0.39	0.00	3.14	0.80	1.38	0.20
		F	0.00	1.24	0.87	0.96	0.59	0.00	3.79	0.80	1.90	0.61
		G	0.20	1.15	1.31	1.20	0.78	0.00	3.67	1.10	2.41	1.02
		H	0.00	0.86	0.87	1.20	1.18	0.18	2.75	0.70	2.76	1.64
		I	0.20	0.58	0.44	1.20	1.37	0.18	1.84	0.10	2.76	2.15
		K	0.00	0.19	0.11	0.84	0.78	0.18	0.46	-0.61	1.90	1.23
2		E	0.00	0.86	0.43	0.72	0.29	0.37	2.87	1.20	1.64	0.51
		F	0.00	0.77	0.54	0.84	0.49	0.55	2.52	1.50	1.98	0.71
		G	0.00	0.58	0.43	0.84	0.69	0.55	1.95	0.50	2.15	1.12
		H	0.00	0.38	0.43	0.84	0.78	0.55	1.26	-0.10	2.07	1.53
		I	0.00	0.29	0.22	0.72	0.59	0.55	0.69	-0.50	1.81	1.12
		K	0.00	0.10	0.00	0.36	0.20	0.91	0.23	-0.80	0.95	0.30

Row	Load Point	Location	Vertical Deflection, in., at Indicated Gages									
			Total					Rebound				
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
9	1	E	0.004	0.178	0.026	0.016	0.006	0.193	0.022	0.007	0.005	0.005
		F	0.006	0.250	0.039	0.039	0.010	0.259	0.032	0.000	0.010	0.010
		G	0.009	0.205	0.047	0.053	0.021	0.215	0.037	0.000	0.022	0.022
		H	0.016	0.142	0.050	0.117	0.045	0.151	0.039	0.000	0.049	0.049
		I	0.028	0.101	0.045	0.173	0.020	0.108	0.035	0.000	0.090	0.090
		K	0.051	0.058	0.023	0.188	0.147	0.061	0.021	0.000	0.149	0.149
2		E	0.006	0.098	0.030	0.033	0.010	0.225	0.033	0.000	0.012	0.012
		F	0.011	0.075	0.036	0.063	0.021	0.171	0.038	0.000	0.028	0.028
		G	0.016	0.045	0.036	0.088	0.039	0.115	0.039	0.000	0.061	0.061
		H	0.026	0.019	0.030	0.108	0.059	0.072	0.034	0.000	0.112	0.112
		I	0.036	0.004	0.023	0.115	0.092	0.048	0.026	0.000	0.144	0.144
		K	0.046	-0.012	0.009	0.053	0.103	0.026	0.012	0.000	0.170	0.170

(Continued)

(12 of 15 sheets)

Table A-7(Continued)

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells									
			Total					Rebound				
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
10	1	E	0.20	0.77	-1.85	0.72	0.39	3.28	2.75	0.51	1.21	0.20
		F	0.20	0.77	0.55	0.72	0.39	0.37	2.98	0.61	1.55	0.41
		G	0.41	0.77	0.66	0.96	0.78	0.37	2.98	1.51	2.07	0.82
		H	0.41	0.58	0.66	0.96	0.98	0.37	2.18	0.81	2.15	1.23
		I	0.20	0.39	0.33	0.96	0.98	0.37	1.61	0.31	2.24	1.74
		K	0.20	0.00	0.11	0.60	0.69	0.37	0.35	-0.20	1.55	1.02
	2	E	-0.20	0.67	0.32	0.48	0.20	-0.73	2.29	2.01	1.38	0.41
		F	-1.00	0.10	-0.33	0.12	0.00	-4.37	1.49	11.22	1.21	0.41
		G	-1.20	-0.09	-0.44	0.00	0.20	-4.55	0.92	11.12	1.36	0.72
		H	-1.20	-0.28	-0.66	0.00	0.20	-4.73	0.46	11.22	1.30	0.92
		I	-1.20	-0.38	-0.66	0.00	0.10	-4.37	0.00	11.22	1.04	0.61
		K	-1.20	-0.57	-0.77	-0.24	-0.19	-4.73	-0.57	11.12	0.35	0.60

Vertical Deflection, in., at Indicated Gages													
		Total									Rebound		
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉			
10	1	E	-0.018	0.118	0.019	-0.004	-0.015	0.186	0.021	0.000	-0.013	-0.001	0.120
		F	-0.012	0.138	0.031	0.018	-0.010	0.219	0.030	0.000	-0.009	0.005	0.140
		G	-0.009	0.112	0.039	0.057	-0.001	0.184	0.036	0.000	0.005	0.008	0.114
		H	0.000	0.068	0.040	0.101	0.020	0.122	0.042	0.000	0.034	0.017	0.070
		I	0.009	0.037	0.036	0.122	0.052	0.082	0.034	0.000	0.074	0.026	0.039
2		K	0.031	0.000	0.016	0.126	0.103	0.034	0.018	0.000	0.138	0.048	0.002
		E	0.005	0.059	0.024	0.029	0.008	0.247	0.031	0.000	0.012	0.011	0.083
		F	0.008	0.043	0.027	0.047	0.017	0.185	0.035	0.000	0.028	0.014	0.067
		G	0.011	0.022	0.025	0.061	0.030	0.129	0.035	0.000	0.060	0.017	0.046
		H	0.018	0.006	0.021	0.074	0.050	0.093	0.031	0.000	0.101	0.024	0.030
		I	0.025	-0.007	0.014	0.074	0.069	0.068	0.022	0.000	0.136	0.031	0.017
		K	0.024	-0.016	0.004	0.033	0.072	0.051	0.010	0.000	0.156	0.030	0.008

(Continued)

(13 of 15 sheets)

Table A-7(Continued)

Row	Loca- tion	Vertical Pressure, psi, at Indicated Cells										Rebound									
		P ₁	P ₂	P ₃	P ₄	Total P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	F ₁	F ₂	F ₃	F ₄	F ₅	F ₆	F ₇	F ₈	F ₉	F ₁₀
11	I	0.00	0.58	0.00	0.36	0.00	0.19	1.60	0.30	3.69	0.10	0.00	0.58	0.00	0.36	0.00	-0.72	1.72	1.10	0.78	0.41
	B	0.00	0.77	0.11	0.48	0.00	0.00	2.18	0.40	0.95	0.10	0.00	0.77	0.11	0.48	0.00	-0.91	2.30	1.20	1.04	0.41
	C	0.00	0.77	0.11	0.48	0.00	18.39	2.41	0.50	1.38	0.10	0.00	0.77	0.11	0.48	0.00	17.48	2.53	1.30	1.47	0.41
	D	0.00	0.77	0.22	0.60	0.20	20.94	2.64	0.60	1.21	0.20	0.00	0.77	0.22	0.60	0.20	20.03	2.76	1.40	1.30	0.51
	E	0.00	0.86	0.43	0.72	0.20	0.37	2.87	0.90	1.55	0.41	0.00	0.86	0.43	0.72	0.20	-0.54	2.99	1.70	1.64	0.72
	F	0.00	0.77	0.43	0.84	0.39	0.37	2.64	1.60	1.90	0.71	0.00	0.77	0.43	0.84	0.39	-0.54	2.76	2.40	1.99	1.02
	G	0.00	0.67	0.43	0.84	0.59	0.55	2.06	0.80	2.15	1.12	0.00	0.67	0.43	0.84	0.59	-0.36	2.15	1.60	2.24	1.43
	H	0.00	0.38	0.22	0.84	0.78	0.37	1.38	0.20	2.07	1.53	0.00	0.38	0.22	0.84	0.78	-0.54	1.50	1.00	2.16	1.84
	I	0.00	0.38	0.22	0.72	0.59	0.55	0.80	-0.40	1.81	1.33	0.00	0.38	0.22	0.72	0.59	-0.36	0.92	0.40	1.90	1.64
	J	0.00	0.19	0.11	0.60	0.39	0.73	0.46	-0.60	1.46	0.81	0.00	0.19	0.11	0.60	0.39	-0.18	0.58	0.20	1.55	1.12
	K	0.00	0.19	0.11	0.48	0.39	0.73	0.34	-0.60	1.29	0.51	0.00	0.19	0.11	0.48	0.39	-0.18	0.46	0.20	1.38	0.82
	L	0.00	0.10	0.11	0.36	0.29	0.73	0.23	-0.60	1.12	0.41	0.00	0.10	0.11	0.36	0.29	-0.18	0.35	0.20	1.21	0.72
	M	0.00	0.00	0.00	0.24	0.20	0.91	0.00	-0.80	0.69	0.10	0.00	0.00	0.00	0.24	0.20	0.00	0.12	0.00	0.78	0.41

Vertical Deflection, in., at Indicated Gages

Row	Loca- tion	Total										Rebound									
		D ₁	D ₂	D ₃	D ₄	Total D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
11	I	0.005	0.060	0.009	0.006	0.010	0.128	0.008	0.000	0.009		-0.009	0.063	0.006	-0.002	-0.008	0.120	0.003	0.000	-0.033	
	B	0.003	0.080	0.140	0.007	0.006	0.169	0.014	0.000	0.006		-0.011	0.083	0.011	-0.001	-0.012	0.161	0.009	0.000	-0.036	
	C	0.004	0.089	0.017	0.010	0.006	0.184	0.018	0.000	0.005		-0.010	0.092	0.014	0.002	-0.012	0.176	0.013	0.000	-0.037	
	D	0.004	0.096	0.021	0.015	0.006	0.196	0.023	0.000	0.006		-0.010	0.099	0.018	0.007	-0.012	0.190	0.018	0.000	-0.036	
	E	0.006	0.099	0.028	0.028	0.009	0.222	0.031	0.000	0.010		-0.008	0.102	0.025	0.020	-0.009	0.214	0.026	0.000	-0.032	
	F	0.009	0.082	0.034	0.054	0.017	0.188	0.037	0.000	0.020		-0.005	0.085	0.031	0.046	-0.001	0.180	0.032	0.000	-0.019	
	G	0.014	0.053	0.036	0.082	0.033	0.128	0.039	0.000	0.051		0.000	0.056	0.033	0.074	0.015	0.120	0.034	0.000	0.009	
	H	0.230	0.026	0.032	0.101	0.060	0.084	0.035	0.000	0.096		0.009	0.020	0.029	0.093	0.042	0.076	0.030	0.000	0.054	
	I	0.032	0.006	0.025	0.114	0.085	0.055	0.028	0.000	0.134		0.018	0.011	0.022	0.106	0.067	0.047	0.023	0.000	0.092	
	J	0.060	-0.003	0.017	0.097	0.102	0.037	0.021	0.000	0.160		0.046	0.000	0.014	0.089	0.084	0.029	0.016	0.000	0.118	
	K	0.054	-0.007	0.013	0.080	0.106	0.031	0.017	0.000	0.168		0.040	-0.004	0.010	0.072	0.088	0.023	0.012	0.000	0.126	
	L	0.049	-0.009	0.011	0.064	0.106	0.027	0.014	0.000	0.171		0.075	-0.006	0.008	0.056	0.088	0.019	0.009	0.000	0.129	
	M	0.041	-0.013	0.008	0.034	0.090	0.021	0.009	0.000	0.154		0.027	-0.010	0.005	0.026	0.072	0.013	0.004	0.000	0.112	

(Continued)

(14 of 15 sheets)

Table A-7 (Continued)

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells										Rebound									
			Total					P ₁ to P ₁₀					P ₁ to P ₁₀					P ₁ to P ₁₀				
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
11	2	B	1.80	0.76	0.22	-0.36	0.88	6.01	0.80	-16.72	-0.35	1.33	0.89	0.57	0.22	0.59	0.19	0.73	1.72	0.40	1.03	0.41
		C	2.21	0.86	0.33	-0.24	0.98	6.01	0.52	-15.62	-0.17	1.43	1.21	0.67	0.33	0.71	0.29	0.73	1.84	0.50	1.21	0.51
		D	1.80	0.86	-1.74	-0.36	0.98	6.01	1.03	-16.52	-0.09	1.43	0.80	0.67	-1.74	0.59	0.29	0.73	1.95	0.60	1.29	0.51
		E	1.80	0.86	0.44	-16.62	1.08	6.01	1.03	-16.52	0.08	1.43	0.80	0.67	0.44	-15.67	0.39	0.73	1.95	0.60	1.46	0.51
		F	2.00	0.76	0.44	-0.24	1.27	6.01	0.80	-16.72	0.17	1.43	1.00	0.57	0.44	0.71	0.58	0.73	1.72	0.40	1.55	0.51
		G	1.80	0.76	0.44	-0.24	1.27	6.01	0.46	-16.92	0.26	1.84	0.80	0.57	0.44	0.71	0.58	0.73	1.38	0.20	1.64	0.92
		H	1.80	0.57	0.22	-0.36	1.27	6.01	0.12	-17.12	0.17	2.05	0.80	0.38	0.22	0.59	0.58	0.73	1.04	0.00	1.55	1.13
		I	1.80	0.48	0.22	-0.36	1.18	6.01	-0.23	-17.12	0.00	1.74	0.80	0.29	0.22	0.59	0.49	0.73	0.69	0.00	1.38	0.82
		J	1.80	0.38	0.22	-0.36	1.08	6.01	-0.46	-17.12	-0.26	1.53	0.80	0.19	0.22	0.59	0.39	0.73	0.46	0.00	1.12	0.61
		K	1.00	0.19	-0.11	-0.84	0.78	5.28	-0.92	-17.12	-0.78	1.23	0.00	0.00	-0.11	0.11	0.09	0.00	0.00	0.00	0.60	0.31
		L	1.00	0.38	0.00	-0.84	0.69	5.46	-0.92	-17.12	-0.86	1.23	0.00	0.19	0.00	0.11	0.00	0.18	0.00	0.00	0.52	0.31
		M	2.00	0.19	0.00	-0.84	0.98	5.28	-0.57	-17.12	-0.69	1.33	1.00	0.00	0.00	0.11	0.29	0.00	0.35	0.00	0.69	0.41
		N	1.80	0.38	0.22	-0.72	0.83	6.01	-0.92	-17.12	-1.12	1.23	0.80	0.19	0.22	0.23	0.19	0.73	0.00	0.00	0.26	0.31

Row	Load Point	Location	Vertical Deflection, in., at Indicated Gages										Rebound									
			Total					D ₁ to D ₁₀					D ₁ to D ₁₀					D ₁ to D ₁₀				
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
11	2	B	0.002	0.052	0.009	0.004	0.002	0.185	0.015	0.000	0.005	0.005	0.005	0.069	0.013	0.016	0.010	0.133	0.014	0.000	-0.002	-0.002
		C	0.000	0.058	0.013	0.009	0.002	0.207	0.022	0.000	0.005	0.005	0.003	0.075	0.017	0.021	0.010	0.155	0.021	0.000	-0.002	-0.002
		D	0.001	0.057	0.015	0.014	0.003	0.243	0.026	0.000	0.008	0.008	0.004	0.074	0.019	0.026	0.011	0.191	0.025	0.000	0.001	0.001
		E	0.002	0.053	0.018	0.020	0.005	0.265	0.030	0.000	0.012	0.012	0.005	0.070	0.022	0.032	0.013	0.213	0.029	0.000	0.005	0.005
		F	0.004	0.039	0.019	0.034	0.012	0.192	0.033	0.000	0.026	0.026	0.007	0.056	0.023	0.046	0.020	0.140	0.032	0.000	0.019	0.019
		G	0.007	0.023	0.018	0.046	0.022	0.141	0.033	0.000	0.052	0.052	0.010	0.040	0.022	0.058	0.030	0.089	0.032	0.000	0.045	0.045
		H	0.013	0.008	0.014	0.655	0.039	0.100	0.028	0.000	0.094	0.094	0.016	0.025	0.018	0.067	0.047	0.048	0.027	0.000	0.087	0.087
		I	0.017	-0.001	0.009	-0.052	0.050	0.080	0.021	0.000	0.120	0.120	0.020	0.016	0.013	0.064	0.058	0.028	0.020	0.000	0.113	0.113
		J	0.019	-0.007	0.005	-0.039	0.057	0.067	0.014	0.000	0.139	0.139	0.022	0.010	0.009	0.051	0.065	0.150	0.013	0.000	0.132	0.132
		K	0.018	-0.011	0.002	-0.025	0.053	0.059	0.009	0.000	0.144	0.144	0.021	0.006	0.006	0.037	0.061	0.007	0.008	0.000	0.137	0.137
		L	0.013	-0.013	-0.001	0.112	0.045	0.056	0.007	0.000	0.133	0.133	0.016	0.004	0.003	0.024	0.053	0.004	0.006	0.000	0.126	0.126
		M	0.008	-0.015	-0.002	0.006	0.038	0.054	0.005	0.000	0.119	0.119	0.011	0.002	0.002	0.018	0.046	0.002	0.004	0.000	0.112	0.112
		N	0.007	-0.015	-0.003	-0.001	0.025	0.053	0.004	0.000	0.085	0.085	0.010	0.002	0.001	0.011	0.033	0.001	0.003	0.000	0.078	0.078

(15 of 15 sheets)

Table A-8
Multiple-wheel Heavy Gear Load Flexible Pavement Test, Static Instrumentation Loading Data
Item 3; Load Condition: 30 kips per wheel, Twin Tandem, 150 psi

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells										Rebound									
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
1	1	E	8.20	3.04	0.17	0.00	-0.35	4.63	2.01	1.33	1.22	0.47	7.46	2.44	0.43	0.12	0.00	4.74	1.80	0.31	0.87	0.47
		F	11.15	4.02	1.55	0.00	-0.35	6.66	2.75	1.73	1.75	0.28	10.41	5.11	1.81	0.71	0.00	6.77	2.54	0.71	1.40	0.28
		G	12.07	5.11	5.67	0.00	-0.18	7.45	3.27	2.34	2.45	0.19	11.33	4.26	5.93	1.42	0.17	7.56	3.06	1.32	2.10	0.19
		H	12.90	5.84	9.71	0.00	-0.35	8.13	3.80	3.06	3.85	0.38	12.16	4.99	9.97	3.09	0.00	8.24	3.59	2.04	3.50	0.38
		I	9.21	5.97	8.85	0.00	-0.18	5.65	3.91	2.96	4.90	-0.09	8.47	5.12	9.11	4.39	0.17	5.76	3.70	1.94	4.55	-0.09
		J	4.79	5.60	12.55	0.00	-0.35	2.94	3.59	2.96	5.60	-0.09	4.05	4.75	12.81	5.34	0.00	3.05	3.38	1.94	5.25	-0.09
		K	2.58	4.63	8.68	0.00	-0.18	1.13	2.96	2.14	5.60	-0.47	1.84	3.78	8.94	5.82	0.17	1.24	2.75	1.12	5.25	-0.47
	2	E	9.50	3.53	2.15	1.19	0.00	10.94	3.27	0.61	2.10	-0.65	9.04	3.65	1.11	0.95	1.21	9.93	3.06	-1.32	1.57	-1.12
		F	20.88	4.51	9.97	2.02	0.00	12.52	4.01	4.89	3.50	-0.84	10.42	4.63	8.93	1.78	1.21	11.51	3.80	2.96	2.97	-1.12
		G	11.34	4.99	12.89	3.20	0.00	13.20	4.44	6.72	4.98	-0.84	10.88	5.11	11.85	2.96	1.21	12.19	4.23	4.79	4.45	-1.31
		H	6.64	4.99	11.17	4.27	18.55	8.69	4.44	6.21	6.29	15.09	6.18	5.11	10.13	4.03	19.76	7.68	4.23	4.28	5.76	14.62
1	1	I	3.05	4.51	17.44	4.99	0.35	4.40	4.01	8.96	7.17	7.60	2.59	4.63	16.40	4.75	1.56	3.39	3.80	7.03	6.64	7.13
		J	1.57	3.53	8.60	3.11	0.00	2.59	3.38	4.48	7.08	1.22	1.11	3.65	7.56	4.87	1.21	1.58	3.17	2.55	6.55	0.75
		K	0.83	2.32	2.57	3.80	66.38	1.69	2.32	2.14	5.33	33.09	0.37	2.44	1.63	3.56	67.59	0.68	2.11	0.21	4.80	32.62
	2	E	0.043	0.014	0.000	0.002	0.000	0.003	0.002	0.000	-0.001	-0.001	0.060	0.016	0.000	0.003	0.001	0.004	0.006	0.001	0.001	0.002
		F	0.045	0.013	0.000	0.003	0.001	0.003	0.003	0.001	-0.001	-0.001	0.062	0.015	0.000	0.004	0.002	0.004	0.007	0.002	0.002	0.002
		G	0.036	0.010	0.000	0.004	0.003	0.002	0.004	0.001	0.000	0.000	0.053	0.012	0.000	0.005	0.004	0.003	0.008	0.002	0.003	0.003
		H	0.018	0.006	0.000	0.006	0.005	0.001	0.003	0.001	0.001	0.001	0.035	0.008	0.000	0.007	0.007	0.002	0.007	0.002	0.004	0.004
		I	0.004	0.003	0.000	0.007	0.012	0.000	0.001	0.001	0.001	0.002	0.021	0.005	0.000	0.008	0.013	0.001	0.005	0.002	0.002	0.005
		J	-0.005	0.001	0.000	0.006	0.018	-0.001	-0.001	-0.001	0.001	0.003	0.012	0.003	0.000	0.007	0.019	0.000	0.003	0.002	0.002	0.006
		K	-0.011	-0.001	0.000	0.005	0.033	-0.001	-0.002	0.001	0.004	0.004	0.006	0.001	0.000	0.006	0.034	0.000	0.002	0.002	0.002	0.007
		E	0.184	0.022	0.000	0.007	0.003	0.006	0.012	0.002	0.001	0.001	0.143	0.023	0.000	0.009	0.008	0.008	0.013	0.003	0.005	0.005
		F	0.122	0.017	0.000	0.009	0.007	0.004	0.014	0.002	0.003	0.003	0.081	0.018	0.000	0.009	0.012	0.006	0.015	0.003	0.007	0.007
		G	0.090	0.011	0.000	0.012	0.013	0.002	0.012	0.003	0.005	0.005	0.049	0.012	0.000	0.012	0.018	0.004	0.013	0.004	0.009	0.009
2	2	H	0.065	0.006	0.000	0.013	0.023	0.000	0.008	0.003	0.009	0.009	0.024	0.007	0.000	0.013	0.028	0.002	0.009	0.004	0.013	0.013
		I	0.052	0.002	0.000	0.013	0.033	0.001	0.005	0.003	0.013	0.013	0.011	0.003	0.000	0.013	0.038	0.003	0.006	0.004	0.017	0.017
		J	0.046	0.000	0.000	0.011	0.038	-0.002	0.002	0.002	0.014	0.014	0.005	0.001	0.000	0.011	0.043	0.000	0.003	0.003	0.018	0.018
		K	0.041	-0.001	0.000	0.007	0.033	-0.002	0.000	0.001	0.011	0.011	0.006	0.000	0.000	0.007	0.029	0.000	0.001	0.002	0.002	0.015

(Continued)

(1 of 4 sheets)

Table A-8 (Continued)

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells									
			Total									
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
5	1	E	3.51	2.19	0.00	0.35	0.35	7.23	2.33	-1.32	1.04	-0.56
		F	4.98	2.92	0.51	0.50	0.35	10.72	3.17	-0.71	1.83	-0.56
		G	5.72	3.65	1.63	1.18	0.35	11.40	4.02	2.34	3.14	-0.37
		H	5.72	4.14	2.74	1.90	0.35	13.77	4.54	3.97	4.72	-0.56
		I	3.14	4.14	2.43	2.85	0.52	9.71	4.75	3.67	6.04	-1.50
		J	1.11	3.78	3.60	3.32	0.52	4.85	4.14	6.01	7.51	-1.12
		K	0.74	3.04	2.05	3.32	0.52	2.15	3.59	3.97	7.63	-1.50
		2										
		E	3.41	2.43	0.17	0.83	0.17	9.82	3.17	0.51	2.02	0.38

Row	Load Point	Location	Rebound									
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
5	1	E	4.24	2.19	0.43	0.59	-0.17	7.23	1.90	-0.61	0.70	0.75
		F	5.71	2.92	0.94	0.83	-0.17	10.72	2.74	0.00	1.49	0.75
		G	6.45	3.65	2.06	1.42	-0.17	11.40	4.59	3.05	2.80	0.94
		H	6.45	4.14	3.17	2.14	-0.17	13.77	4.11	4.68	4.38	0.75
		I	3.87	4.14	2.86	3.09	0.00	9.71	4.32	4.38	6.30	-0.19
		J	1.84	3.78	4.05	3.56	0.00	4.85	4.01	6.72	7.17	0.19
		K	1.47	3.04	2.49	3.56	0.00	2.15	3.16	4.68	7.26	-0.19
		2										
		E	3.96	2.55	1.03	1.07	0.17	9.26	2.95	0.71	2.02	-1.59

Row	Load Point	Location	Rebound									
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
5	1	E	3.96	2.55	1.03	1.07	0.17	9.26	2.95	0.71	2.02	-1.59
		F	1.14	3.04	1.46	1.31	0.00	10.84	3.69	5.09	3.15	-1.59
		G	3.41	3.28	2.23	1.90	0.17	11.63	4.11	6.52	4.73	-1.78
		H	2.21	3.16	2.49	2.38	0.17	7.34	4.11	6.32	6.12	10.12
		I	1.19	3.04	1.72	2.61	0.00	28.59	3.69	9.57	6.82	3.66
		J	0.55	2.19	1.03	2.50	0.00	1.36	2.85	4.89	6.47	0.37
		K	0.27	1.58	0.51	2.02	0.00	0.68	2.11	2.24	4.73	26.81
		2										
		E	3.96	2.55	1.03	1.07	0.17	9.26	2.95	0.71	2.02	-1.59

Vertical Deflection, in., at Indicated Gages

Row	Load Point	Location	Total									
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
5	1	E	0.083	0.044	0.000	0.005	0.007	0.014	0.012	0.002	0.000	0.000
		F	0.102	0.046	0.000	0.008	0.008	0.014	0.020	0.003	0.001	0.001
		G	0.077	0.038	0.000	0.013	0.014	0.010	0.028	0.005	0.004	0.004
		H	0.044	0.028	0.000	0.018	0.023	0.007	0.024	0.006	0.008	0.008
		I	0.015	-0.021	0.000	0.021	0.042	0.004	0.017	0.007	0.015	0.015
		J	0.001	0.012	0.000	0.022	0.056	0.002	0.011	0.005	0.024	0.024
		K	-0.008	0.008	0.000	0.019	0.067	0.000	0.005	0.005	0.044	0.044
		2										
		E	0.217	0.062	0.000	0.012	0.005	0.021	0.040	0.007	0.004	0.004

Row	Load Point	Location	Rebound									
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
5	1	E	0.111	0.039	0.000	0.002	0.000	0.015	0.014	0.003	-0.003	-0.003
		F	0.130	0.041	0.000	0.005	0.001	0.015	0.022	0.004	-0.002	-0.002
		G	0.105	0.033	0.000	0.010	0.007	0.011	0.030	0.006	0.001	0.001
		H	0.072	0.023	0.000	0.015	0.016	0.008	0.026	0.007	0.007	0.007
		I	0.043	-0.026	0.000	0.018	0.035	0.005	0.019	0.008	0.012	0.012
		J	0.029	0.007	0.000	0.019	0.049	0.003	0.013	0.007	0.021	0.021
		K	0.020	0.003	0.000	0.016	0.060	0.002	0.007	0.006	0.041	0.041
		2										
		E	0.148	0.055	0.000	0.008	-0.046	0.022	0.041	0.006	0.008	0.008

Row	Load Point	Location	Rebound									
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
5	1	E	0.086	0.045	0.000	0.015	-0.038	0.017	0.048	0.008	0.012	0.012
		F	0.046	0.029	0.000	0.021	-0.017	0.011	0.045	0.011	0.022	0.022
		G	0.023	0.017	0.000	0.025	0.043	0.006	0.035	0.012	0.034	0.034
		H	0.009	0.010	0.000	0.025	0.076	0.003	0.022	0.012	0.046	0.046
		I	0.001	0.005	0.000	0.021	0.088	0.001	0.011	0.009	0.053	0.053
		J	-0.003	0.003	0.000	0.015	0.130	0.000	0.006	0.007	0.049	0.049
		K										
		2										
		E	0.086	0.045	0.000	0.015	-0.038	0.017	0.048	0.008	0.012	0.012

(Continued)

(2 of 4 sheets)

Table A-8 (Continued)

Row	Load Point	Vertical Pressure, psi, at Indicated Cells									
		Total					Rebound				
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
7	1	1.47	1.09	0.08	0.36	0.00	3.39	1.79	1.22	0.88	-0.66
		2.21	1.46	0.17	0.48	0.00	4.97	2.32	0.82	1.49	-0.66
		0.92	1.95	0.51	0.60	0.17	5.65	3.06	1.53	2.28	-0.84
		2.12	1.95	1.37	0.95	0.00	5.87	3.48	2.14	3.50	-1.13
		1.47	1.95	4.12	1.31	0.17	3.95	3.59	2.04	4.38	-1.69
		0.83	1.95	2.32	1.43	0.00	1.70	3.16	2.85	1.99	-1.88
		0.46	1.34	1.20	1.43	3.64	0.23	2.63	1.12	4.81	-2.25
		1.47	1.22	0.18	0.36	0.17	3.04	2.12	-0.20	1.23	-0.28
2		1.57	1.46	0.35	0.60	0.17	3.38	2.34	0.21	1.93	-0.19
		1.20	1.46	0.69	0.71	0.17	2.82	2.85	0.61	2.63	-0.15
		0.74	1.46	1.04	0.95	0.00	1.69	2.85	0.92	3.15	-0.19
		0.55	1.22	0.52	1.07	0.17	0.56	2.54	0.41	3.41	-0.28
		0.37	0.98	0.35	1.07	0.17	0.11	2.01	-0.30	3.06	-0.66
		0.28	0.73	0.18	0.83	0.17	-0.34	1.48	-0.81	2.10	-0.56

Vertical Deflection, in., at Indicated Gages

Row	Load Point	Total									
		Total					Rebound				
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
7	1	0.045	0.064	0.000	0.005	-0.012	0.041	0.051	0.005	0.008	0.008
		0.049	0.059	0.000	0.010	-0.010	0.043	0.076	0.008	0.010	0.010
		0.005	0.059	0.000	0.016	-0.004	0.036	0.086	0.008	0.016	0.016
		0.015	0.040	0.000	0.024	0.014	0.024	0.098	0.016	0.030	0.030
		-0.001	0.026	0.000	0.029	0.047	0.016	0.085	0.019	0.048	0.048
		-0.013	0.015	0.000	0.031	0.083	0.009	0.055	0.020	0.059	0.059
		-0.020	0.000	0.000	0.027	0.103	0.006	0.032	0.017	0.084	0.084
2		0.024	0.072	0.000	0.013	0.010	0.058	0.110	0.010	0.007	0.007
		0.016	0.062	0.000	0.020	0.018	0.048	0.133	0.017	0.018	0.018
		0.006	0.046	0.000	0.027	0.037	0.032	0.154	0.023	0.042	0.042
		-0.001	0.036	0.000	0.031	0.093	0.022	0.129	0.026	0.108	0.108
		-0.006	0.028	0.000	0.031	0.133	0.014	0.082	0.022	0.166	0.166
		-0.009	0.005	0.000	0.028	0.143	0.010	0.054	0.023	0.171	0.171
		-0.010	0.003	0.000	0.021	0.189	0.008	0.037	0.018	0.220	0.220

(Continued)

(3 of 4 sheets)

Table A-8(Concluded)

Row	Load Location	Vertical Pressure, psi, at Indicated Cells									
		Total									
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
11	1	0.46	0.61	0.00	0.24	0.17	1.13	1.06	-0.10	0.52	0.10
		0.65	0.73	0.00	0.24	0.00	1.92	1.38	0.10	0.78	0.10
		0.83	0.85	0.09	0.48	0.00	2.71	1.69	0.21	1.22	0.10
		0.65	0.85	0.18	0.49	0.17	2.26	1.90	0.82	1.66	0.10
		0.46	0.98	0.26	0.60	0.00	1.36	1.90	2.65	2.09	0.10
		0.28	0.85	0.26	0.72	0.17	0.91	1.80	1.84	2.27	0.29
		0.09	0.61	0.18	0.72	0.17	0.45	1.48	1.43	2.09	11.16
		0.28	0.49	0.00	-0.12	-0.17	1.01	1.06	0.00	0.70	-0.09
2		0.28	0.49	0.00	-0.12	-0.17	1.24	1.27	0.00	0.87	-0.09
		0.28	0.61	0.00	-0.12	0.00	1.01	1.48	0.40	1.14	-0.09
		0.19	0.61	0.09	0.00	0.00	0.56	1.48	0.61	1.40	0.00
		0.09	0.49	0.09	0.12	0.00	0.33	1.27	0.30	1.49	-0.37
		0.09	0.49	0.00	0.00	-0.17	0.22	1.06	0.20	1.31	-0.46
		0.09	0.24	0.09	0.00	-0.17	0.11	0.74	0.00	0.96	-0.65

Row	Load Location	Vertical Deflection, in., at Indicated Gages									
		Total									
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
11	1	0.051	0.033	0.000	0.002	-0.013	0.064	0.071	0.004	-0.020	0.000
		0.035	0.035	0.000	0.005	-0.013	0.071	0.112	0.010	-0.013	0.000
		0.028	0.029	0.000	0.010	-0.008	0.060	0.128	0.015	-0.009	0.000
		0.022	0.018	0.000	0.014	0.001	0.042	0.145	0.022	0.011	0.000
		0.017	0.009	0.000	0.018	0.018	0.026	0.126	0.027	0.059	0.000
		0.013	0.004	0.000	0.018	0.032	0.017	0.079	0.029	0.100	0.000
		0.011	0.000	0.000	0.016	0.041	0.012	0.045	0.025	0.119	0.000
2		0.052	0.025	0.000	0.022	0.024	0.087	0.105	0.027	-0.001	0.000
		0.049	0.020	0.000	0.025	0.029	0.073	0.118	0.034	0.010	0.000
		0.046	0.014	0.000	0.029	0.037	0.094	0.136	0.041	0.033	0.000
		0.043	0.008	0.000	0.030	0.050	0.038	0.106	0.045	0.111	0.000
		0.041	0.005	0.000	0.030	0.061	0.028	0.062	0.057	0.155	0.000
		0.040	0.002	0.000	0.027	0.066	0.023	0.033	0.040	0.168	0.000
		0.040	0.001	0.000	0.023	0.059	0.020	0.020	0.032	0.230	0.000

(A of 4 sheets)

Table A-9
Multiple-wheel Heavy Gear Load Flexible Pavement Test, Static Instrumentation Loading Data
Item 4: Load Condition: 30 kips per wheel, Twin Tandem, 150 psi

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells										Rebound									
			Total																			
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
1	1	E	0.00	6.96	8.50	3.11	1.17	-0.37	5.73	0.80	2.41	0.51	0.00	6.29	9.26	2.27	0.59	-0.55	5.50	1.20	1.98	0.41
		F	0.00	7.72	13.51	4.43	3.22	0.00	6.54	2.41	3.27	0.92	0.00	7.05	14.27	3.59	2.64	-0.18	6.31	2.81	2.84	0.82
		G	0.00	7.53	12.09	5.50	7.53	-0.19	6.42	1.70	4.14	2.25	0.00	6.86	12.85	4.66	6.95	-0.37	6.19	2.10	3.71	2.15
		H	0.00	6.10	17.87	6.22	10.76	-0.19	5.04	2.71	4.74	3.59	0.00	5.43	18.63	5.38	10.18	-0.37	4.81	3.11	4.31	3.49
		I	0.00	4.29	11.44	6.34	12.03	-0.19	3.55	2.01	4.82	4.00	0.00	3.62	12.20	5.50	11.45	-0.37	3.32	2.41	4.39	3.90
		J	0.00	2.67	3.38	5.74	13.49	-0.19	2.29	0.00	4.39	4.82	0.00	2.00	4.14	4.90	12.91	-0.37	2.06	0.40	3.96	4.72
		K	0.00	1.71	0.98	4.66	9.88	-0.37	1.37	-0.60	3.70	3.79	0.00	1.04	1.74	3.82	9.30	-0.55	1.14	-0.20	3.27	3.69
2	1	E	23.69	6.48	16.77	3.94	3.42	70.46	8.25	7.41	3.96	1.74	24.09	6.57	15.03	7.82	4.30	70.46	7.56	4.10	3.61	1.23
		F	-0.40	6.39	15.03	5.02	7.73	0.91	8.25	6.91	5.00	4.71	0.00	6.48	13.29	7.90	8.61	0.91	7.56	3.60	4.65	4.20
		G	-0.40	4.77	23.96	5.53	10.08	0.54	6.42	9.41	5.51	6.86	0.00	4.86	22.22	5.38	10.96	0.54	5.73	6.10	5.16	6.35
		H	-0.40	2.96	11.11	5.38	11.64	0.54	4.36	6.11	5.60	7.88	0.00	3.05	9.37	5.26	12.52	0.54	3.67	2.80	5.25	7.37
		I	-0.40	1.62	4.14	4.66	12.81	0.54	2.75	3.21	5.00	9.11	0.00	1.71	2.40	4.54	13.69	0.54	2.06	-0.10	4.65	8.60
		J	-0.40	0.86	2.61	3.59	7.92	0.54	1.83	2.40	4.05	6.55	0.00	0.95	0.87	3.47	8.80	0.54	1.14	-0.91	3.70	6.04
		K	-0.40	0.38	2.18	2.51	3.62	0.36	1.37	2.10	2.93	3.27	0.00	0.47	0.44	2.39	4.50	0.36	0.68	-1.21	2.58	2.76

Row	Load Location	Vertical Deflection, in., at Indicated Gages										Rebound									
		Total																			
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	
1	1	E	0.006	0.047	0.007	0.004	0.000	0.007	0.002	0.000	-0.001	0.029	0.056	0.010	0.014	0.013	0.016	0.002	0.000	0.000	0.007
		F	0.008	0.037	0.010	0.009	0.001	0.005	0.003	0.000	-0.001	0.031	0.046	0.013	0.019	0.014	0.014	0.003	0.000	0.000	0.007
		G	0.014	0.027	0.011	0.017	0.005	0.002	0.003	0.000	0.000	0.037	0.036	0.014	0.027	0.016	0.011	0.003	0.000	0.000	0.008
		H	0.025	0.017	0.010	0.026	0.010	-0.001	0.005	0.000	0.001	0.048	0.026	0.013	0.036	0.023	0.008	0.003	0.000	0.000	0.009
		I	0.039	0.009	0.008	0.034	0.018	-0.004	0.003	0.000	0.003	0.062	0.018	0.011	0.044	0.031	0.005	0.003	0.000	0.000	0.011
		J	0.055	0.004	0.005	0.031	0.027	-0.006	0.003	0.000	0.004	0.078	0.013	0.008	0.041	0.040	0.003	0.003	0.000	0.000	0.012
		K	0.068	-0.003	0.002	0.022	0.032	-0.007	0.002	0.000	0.005	0.091	0.006	0.005	0.032	0.045	0.002	0.002	0.000	0.000	0.013
2	1	E	0.014	0.051	0.018	0.024	0.010	0.160	0.005	0.000	0.002	-0.050	0.074	0.019	0.019	0.012	0.027	0.005	0.000	0.000	0.008
		F	0.024	0.039	0.020	0.038	0.018	0.010	0.005	0.000	0.004	-0.040	0.062	0.021	0.045	0.020	0.021	0.005	0.000	0.000	0.010
		G	0.043	0.022	0.019	0.052	0.029	0.004	0.006	0.000	0.008	-0.021	0.045	0.020	0.059	0.031	0.015	0.006	0.000	0.000	0.014
		H	0.090	0.008	0.015	0.060	0.044	-0.001	0.005	0.000	0.012	0.026	0.031	0.016	0.067	0.046	0.010	0.005	0.000	0.000	0.018
		I	0.163	-0.002	0.010	0.057	0.058	-0.004	0.005	0.000	0.017	0.099	0.021	0.011	0.064	0.060	0.007	0.005	0.000	0.000	0.023
		J	0.164	-0.003	0.005	0.045	0.056	-0.007	0.004	0.000	0.017	0.100	0.014	0.006	0.052	0.068	0.004	0.004	0.000	0.000	0.023
		K	0.222	-0.013	0.003	0.029	0.062	-0.008	0.004	0.000	0.015	0.158	0.010	0.004	0.036	0.064	0.003	0.004	0.000	0.000	0.021

(Continued)

(1 of 4 sheets)

Table A-9 (Continued)

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells									
			Total					Rebound				
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
5	1	E	0.00	4.48	1.74	2.27	1.96	-0.37	8.25	2.30	2.92	0.41
		F	0.00	4.95	3.05	3.11	2.94	0.18	9.40	3.70	3.96	1.53
		G	0.00	4.76	2.94	3.82	5.09	-0.55	9.17	3.40	5.16	4.92
		H	0.00	3.62	3.92	4.30	6.46	-0.37	7.34	5.30	5.94	7.78
		I	0.00	2.28	1.63	4.18	7.24	-0.18	4.81	3.40	6.03	9.01
	2	J	0.00	1.33	-0.44	3.59	7.43	-0.18	2.98	0.00	5.51	10.35
		K	0.00	0.57	-1.31	2.87	5.28	-0.18	1.83	1.21	4.56	8.50
		L	0.00	3.34	2.18	2.51	1.27	120.53	8.26	7.01	3.88	2.26
		M	0.00	2.95	2.51	3.11	2.15	0.91	8.03	6.91	5.51	8.40
		N	0.00	2.19	1.42	0.71	3.22	0.91	3.90	5.21	5.51	7.17
		O	0.00	1.33	0.44	2.63	2.64	0.72	2.18	2.41	4.82	10.56
		P	0.00	0.57	-0.43	1.91	1.27	0.72	1.15	1.61	3.79	7.07
		Q	0.00	0.10	-0.87	1.91	1.27	0.72	0.58	0.00	3.69	3.69
		R	0.00	-0.10	-0.98	1.19	-0.69	0.54	0.58	1.41	2.67	3.69
		S	0.00									
		T	0.00									
		U	0.00									
		V	0.00									
		W	0.00									
		X	0.00									

Row	Load Point	Location	Vertical Deflection, in., at Indicated Gages									
			Total					Rebound				
			d ₁	d ₂	d ₃	d ₄	d ₅	d ₆	d ₇	d ₈	d ₉	d ₁₀
5	1	E	-0.006	0.120	0.023	0.022	0.011	0.058	0.006	0.000	0.000	0.007
		F	-0.004	0.127	0.032	0.039	0.015	0.048	0.008	0.000	0.000	0.009
		G	+0.008	0.103	0.038	0.076	0.027	0.038	0.010	0.000	0.000	0.130
		H	0.029	0.072	0.039	0.109	0.047	0.027	0.010	0.000	0.000	0.000
		I	0.064	0.046	0.034	0.128	0.078	0.017	0.009	0.000	0.000	0.000
	2	J	0.113	0.026	0.025	0.146	0.109	0.009	0.008	0.000	0.000	0.037
		K	0.135	0.013	0.017	0.129	0.129	0.004	0.006	0.000	0.000	0.000
		L	0.009	0.268	0.045	0.051	0.013	0.027	0.047	0.009	0.000	0.042
		M	0.019	0.195	0.093	0.121	0.027	0.047	0.019	0.000	0.000	0.003
		N	0.043	0.147	0.053	0.163	0.060	0.029	0.018	0.000	0.000	0.000
		O	0.111	0.110	0.046	0.189	0.110	0.013	0.016	0.000	0.000	0.000
		P	0.221	0.087	0.033	0.216	0.148	0.002	0.015	0.000	0.000	0.037
		Q	0.226	0.076	0.022	0.178	0.171	-0.005	0.011	0.000	0.000	0.052
		R	0.312	0.069	0.015	0.121	0.177	-0.009	0.009	0.000	0.000	0.058
		S										
		T										
		U										
		V										
		W										
		X										

(2 of 4 sheets)

(Continued)

Table A-2(Continued)

Row	Loc- tion	Vertical Pressure, psi, at Indicated Cells										Rebound									
		Total																			
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
7	1	1.60	2.10	0.98	1.31	0.48	-0.55	5.51	0.70	2.16	0.82	1.60	2.29	0.21	1.55	0.48	-0.19	6.08	2.91	2.42	2.35
	F	0.00	2.29	2.07	1.67	0.88	-0.55	6.08	0.50	2.93	1.44	0.00	2.48	1.30	1.91	0.88	-0.19	6.65	2.72	3.19	2.97
	G	0.00	2.01	5.01	1.91	1.36	-0.36	5.85	0.70	3.71	2.97	0.00	2.20	4.24	2.15	1.36	0.07	6.42	2.91	3.97	4.50
	H	0.00	1.53	2.73	2.03	2.15	-0.36	4.48	1.00	4.31	4.51	0.00	1.72	1.96	2.27	2.15	0.00	5.05	3.22	4.57	6.04
	I	0.00	1.05	1.64	1.91	2.54	0.00	2.99	-0.50	4.31	5.13	0.00	1.24	0.87	2.15	2.54	0.36	3.56	1.71	4.57	6.66
	J	0.00	0.98	1.20	1.67	1.95	0.00	1.50	-1.61	3.71	5.54	0.00	0.77	0.43	1.91	1.95	0.36	2.27	0.60	3.97	7.07
	K	0.00	0.19	0.87	1.31	1.27	0.00	0.69	-2.01	3.02	3.90	0.00	0.38	0.10	1.55	1.27	0.36	1.26	0.20	3.28	5.43
2	1	0.00	1.34	1.19	1.19	0.59	-0.18	4.24	0.61	2.42	1.13	-0.20	0.86	1.30	1.31	0.39	-0.91	4.81	6.51	2.67	1.54
	F	0.00	1.15	1.30	1.31	0.98	0.00	3.79	0.81	2.85	1.74	-0.20	0.67	1.41	1.43	0.78	-0.73	4.36	6.71	3.10	2.15
	G	0.00	0.86	0.76	1.43	1.27	0.00	2.87	0.20	3.11	2.46	-0.20	0.38	0.87	1.55	1.07	-0.73	3.44	6.10	3.36	2.87
	H	0.00	0.58	0.43	1.19	1.37	0.00	1.72	-0.50	3.02	2.87	-0.20	0.10	0.54	1.31	1.17	-0.73	2.29	5.40	3.27	3.28
	I	0.00	0.19	0.21	0.96	0.98	0.00	0.69	-0.80	2.50	2.46	-0.20	-0.29	0.32	1.08	0.78	-0.73	1.26	5.10	2.75	2.87
	J	0.00	0.00	0.00	0.72	0.59	0.00	0.12	-1.00	2.59	1.44	-0.20	-0.48	0.11	0.84	0.39	-0.73	0.69	4.90	2.84	1.85
	K	0.00	-0.19	-0.11	0.48	0.39	0.00	-0.11	-1.00	1.30	0.62	-0.20	-0.67	0.00	0.60	0.19	-0.73	0.46	4.90	1.55	1.03

Row	Loc- tion	Vertical Pressure, psi, at Indicated Cells										Rebound									
		Total																			
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
7	1	0.008	0.163	0.031	0.016	0.004	0.129	0.017	0.000	0.009	0.009	0.040	0.189	0.029	0.004	-0.007	0.095	0.017	0.000	-0.002	
	F	0.010	0.195	0.047	0.042	0.009	0.138	0.023	0.000	0.012	0.012	0.042	0.221	0.043	0.030	-0.002	0.104	0.023	0.000	0.001	
	G	0.016	0.143	0.056	0.105	0.022	0.114	0.027	0.000	0.023	0.023	0.048	0.169	0.052	0.093	0.011	0.080	0.027	0.000	0.012	
	H	0.032	0.085	0.059	0.165	0.059	0.081	0.028	0.000	0.043	0.043	0.064	0.111	0.055	0.153	0.048	0.047	0.028	0.000	0.032	
	I	0.050	0.048	0.053	0.192	0.107	0.055	0.025	0.000	0.072	0.072	0.082	0.074	0.049	0.180	0.096	0.021	0.025	0.000	0.061	
	J	0.070	0.021	0.039	0.219	0.150	0.034	0.019	0.000	0.099	0.099	0.102	0.047	0.035	0.207	0.139	0.000	0.019	0.000	0.088	
	K	0.082	0.006	0.027	0.194	0.175	0.022	0.014	0.000	0.115	0.115	0.114	0.032	0.023	0.292	0.164	-0.012	0.014	0.000	0.104	
2	1	0.006	0.262	0.045	0.058	0.014	0.248	0.035	0.000	0.016	0.016	0.028	0.197	0.042	0.036	-0.004	0.194	0.029	0.000	-0.007	
	F	0.011	0.198	0.050	0.118	0.027	0.187	0.039	0.000	0.030	0.030	0.033	0.133	0.047	0.096	0.009	0.133	0.033	0.000	0.007	
	G	0.022	0.146	0.052	0.165	0.058	0.134	0.039	0.000	0.063	0.063	0.044	0.081	0.049	0.143	0.040	0.080	0.033	0.000	0.040	
	H	0.033	0.114	0.045	0.187	0.102	0.102	0.034	0.000	0.104	0.104	0.055	0.049	0.042	0.165	0.084	0.042	0.028	0.000	0.081	
	I	0.046	0.091	0.031	0.213	0.142	0.078	0.026	0.000	0.142	0.142	0.068	0.026	0.028	0.191	0.124	0.024	0.020	0.000	0.119	
	J	0.053	0.078	0.021	0.169	0.162	0.064	0.019	0.000	0.161	0.161	0.075	0.013	0.018	0.147	0.144	0.010	0.013	0.000	0.138	
	K	0.049	0.071	0.014	0.113	0.163	0.057	0.014	0.000	0.164	0.164	0.071	0.005	0.011	0.091	0.150	0.003	0.008	0.000	0.141	

(Continued)

(3 of 4 sheets)

Table A-9 (Continued)

Row	Load Point	Location	Total										Rebound									
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
11	1	E	0.00	0.86	0.32	0.60	0.19	28.04	2.75	0.70	1.20	0.31	0.20	1.53	0.32	0.72	0.49	27.49	2.98	0.20	1.55	0.31
		F	-0.20	0.95	0.43	0.72	0.29	37.14	2.86	1.10	1.63	0.62	0.00	1.62	0.43	0.84	0.59	36.59	3.09	0.60	1.98	0.62
		G	-0.20	0.10	0.54	0.72	0.19	-0.36	2.64	7.01	1.89	0.92	0.00	0.77	0.54	0.84	0.49	-0.91	2.87	6.51	2.24	0.92
		H	-0.20	0.00	0.43	0.72	0.39	-0.36	2.06	5.90	2.06	1.44	0.00	0.67	0.43	0.84	-0.69	-0.91	2.29	5.40	2.41	1.44
		I	-0.20	-0.29	0.32	0.72	0.49	-0.36	1.37	5.30	1.98	2.05	0.00	0.38	0.32	0.84	0.79	-0.91	1.60	4.80	2.33	2.05
	2	J	-0.20	-0.48	0.11	0.60	0.39	-0.36	0.69	5.10	1.72	1.74	0.00	0.19	0.11	0.72	0.69	-0.91	0.92	4.60	2.07	1.74
		K	-0.20	-0.57	0.11	0.36	0.19	-0.55	0.23	4.90	1.37	1.13	0.00	0.10	0.11	0.48	0.49	-1.10	0.46	4.40	1.72	1.13
		E	0.00	0.48	0.21	0.36	0.20	-1.28	1.72	5.10	1.21	0.41	0.00	0.57	0.10	0.36	0.10	-0.18	1.95	0.70	1.29	0.51
		F	0.00	0.38	-0.96	0.60	0.30	-1.28	1.49	4.80	1.38	0.62	0.00	0.47	-2.07	0.60	0.20	-0.18	1.72	0.40	1.46	0.72
		G	0.00	0.29	0.21	0.48	0.39	-1.28	1.15	4.50	1.38	0.82	0.00	0.38	0.10	0.48	0.29	-0.18	1.38	6.10	1.46	0.92
12	1	H	0.00	0.19	0.11	0.36	0.39	-1.28	0.69	4.40	1.21	1.03	0.00	0.28	0.00	0.36	0.29	-0.18	0.92	0.30	1.29	1.13
		I	0.00	0.10	0.11	0.36	0.30	-1.28	0.34	4.40	1.12	0.82	0.00	0.19	0.00	0.36	0.20	-0.18	0.57	0.00	1.20	0.92
		J	0.00	0.00	0.11	0.24	0.20	-1.28	0.11	4.30	0.86	0.41	0.00	0.09	0.00	0.24	0.20	-0.18	0.34	-0.10	0.94	0.51
		K	0.00	-0.09	0.11	0.24	0.20	-1.28	0.00	4.30	0.52	0.21	0.00	0.00	0.00	0.24	0.10	-0.18	0.23	-0.10	0.60	0.31
		2	E	0.001	0.060	0.020	0.010	0.002	0.170	0.022	0.000	0.002		-0.001	0.108	0.023	0.026	0.016	0.191	0.020	0.000	-0.006
	F		0.002	0.062	0.028	0.024	0.005	0.201	0.031	0.000	0.007		0.000	0.110	0.031	0.040	0.019	0.222	0.029	0.000	-0.001	
	G		0.005	0.062	0.033	0.051	0.013	0.155	0.035	0.000	0.020		0.003	0.090	0.036	0.067	0.027	0.176	0.033	0.000	0.012	
	H		0.010	0.043	0.033	0.067	0.028	0.101	0.056	0.000	0.048		0.008	0.071	0.036	0.063	0.042	0.122	0.034	0.000	0.040	
	I		0.018	0.008	0.028	0.092	0.053	0.058	0.032	0.000	0.095		0.016	0.036	0.031	0.108	0.067	0.079	0.030	0.000	0.087	
	13	1	J	0.028	-0.011	0.019	0.102	0.079	0.029	0.024	0.000	0.136		0.026	0.017	0.022	0.118	0.093	0.050	0.022	0.000	0.128
K			0.057	-0.021	0.011	0.082	0.093	0.015	0.017	0.000	0.158		0.055	0.007	0.014	0.098	0.107	0.036	0.015	0.000	0.150	
E			0.002	0.036	0.018	0.018	0.004	0.244	0.029	0.000	0.013		-0.078	0.046	-0.006	-0.098	0.018	0.164	-0.016	0.000	-0.003	
F			0.005	0.024	0.020	0.031	0.011	0.175	0.032	0.000	0.028		-0.075	0.034	-0.004	-0.085	0.025	0.095	-0.013	0.000	0.012	
G			0.009	0.011	0.019	0.043	0.021	0.131	0.032	0.000	0.054		-0.071	0.021	-0.005	-0.073	0.035	0.051	-0.013	0.000	0.038	
2		H	0.014	-0.002	0.014	0.050	0.034	0.094	0.027	0.000	0.096		-0.066	0.008	-0.010	-0.066	0.048	0.014	-0.018	0.000	0.080	
		I	0.018	-0.011	0.009	0.045	0.047	0.073	0.019	0.000	0.125		-0.062	-0.016	-0.015	-0.071	0.061	-0.007	-0.026	0.000	0.109	
		J	0.020	-0.016	0.004	0.032	0.052	0.061	0.013	0.000	0.144		-0.060	-0.016	-0.020	-0.084	0.006	-0.019	-0.032	0.000	0.128	
		K	0.110	-0.001	0.029	0.162	0.053	0.079	0.056	0.000	0.179		0.030	-0.009	0.005	0.046	0.067	-0.001	0.011	0.000	0.163	

(4 of 4 sheets)

Table A-10
Multiple-wheel Heavy Gear Load Flexible Pavement Test, Static Instrumentation Loading Data
Item 3; Load Condition: 60 kips per wheel, twin tandem, 200 psi

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells										Rebound									
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
1	1	E	15.76	5.36	0.35	0.00	0.00	9.03	3.59	0.71	2.27	--	15.11	5.61	-1.54	6.42	0.00	10.61	4.01	1.22	1.25	--
		F	18.89	7.55	4.64	-1.19	0.00	11.51	4.66	1.83	4.02	--	18.33	7.80	2.75	5.23	0.00	13.09	5.28	2.34	3.50	--
		G	18.89	9.01	13.41	1.78	0.00	11.96	5.71	4.28	6.72	--	18.33	9.56	11.52	8.20	0.00	13.54	6.13	4.79	5.60	--
		H	20.37	9.98	18.90	3.56	-0.17	12.98	6.34	6.01	8.57	--	19.72	10.23	17.01	9.98	-0.17	14.56	6.76	6.52	8.05	--
		I	13.73	9.98	14.95	4.06	-0.35	8.01	5.23	5.09	10.23	--	13.08	10.23	13.06	10.45	-0.35	9.59	6.65	5.60	9.71	--
		J	6.36	9.01	11.31	4.51	-0.17	3.16	5.71	7.43	11.01	--	5.71	9.26	9.42	10.93	-0.17	4.34	6.13	7.94	10.49	--
		K	2.68	6.57	15.12	1.18	0.00	0.22	4.23	4.38	9.40	--	2.03	6.82	13.23	7.60	0.00	1.80	4.65	4.89	8.88	--
	2	E	17.60	7.55	2.41	1.19	0.00	21.45	6.65	1.73	4.37	--	17.51	8.15	1.72	2.37	3.81	22.01	6.65	-2.75	4.55	--
		F	17.97	9.26	16.84	2.38	0.00	22.80	8.13	11.71	7.60	--	17.88	9.86	16.15	3.56	3.81	23.36	8.13	7.25	7.78	--
		G	19.62	10.23	23.63	4.75	0.00	24.38	8.87	15.68	10.49	--	19.53	10.83	22.94	5.93	3.81	24.94	8.87	11.20	10.67	--
		H	13.17	10.23	15.64	5.94	4.51	17.50	8.76	12.22	12.85	--	13.08	10.83	14.95	7.12	8.32	18.06	8.76	7.74	13.03	--
2	1	I	5.53	8.89	25.43	5.94	54.42	6.78	7.81	18.33	13.98	--	5.44	9.49	24.74	7.12	58.23	7.34	7.81	13.85	14.16	--
		J	2.49	6.82	18.73	6.89	-2.43	2.71	6.34	13.44	13.37	--	2.40	7.42	18.04	8.07	1.38	3.27	6.34	8.96	13.55	--
		K	1.20	4.63	13.95	4.75	74.87	1.13	4.58	4.27	9.96	--	1.11	5.23	13.26	5.93	78.68	1.69	4.58	-0.21	10.14	--
	2	E	0.121	0.023	--	0.002	0.000	0.003	0.000	0.001	0.001	--	0.114	0.024	--	0.002	0.001	0.004	0.005	0.001	0.003	--
		F	0.128	0.021	--	0.005	0.000	0.003	0.001	0.001	0.001	--	0.121	0.022	--	0.005	0.001	0.004	0.006	0.001	0.003	--
		G	0.108	0.017	--	0.007	0.001	0.002	0.001	0.001	0.001	--	0.101	0.018	--	0.007	0.002	0.003	0.006	0.001	0.003	--
		H	0.153	0.011	--	0.010	0.003	0.000	0.001	0.002	0.001	--	0.146	0.012	--	0.010	0.004	0.001	0.006	0.002	0.003	--
		I	0.031	0.008	--	0.012	0.007	-0.001	-0.001	0.002	0.001	--	0.024	0.009	--	0.012	0.008	0.000	0.004	0.002	0.003	--
		J	0.009	0.003	--	0.012	0.011	-0.002	-0.003	0.002	0.002	--	0.002	0.004	--	0.012	0.012	-0.001	0.002	0.002	0.004	--
		K	-0.008	0.000	--	0.009	0.018	-0.002	-0.005	0.001	0.002	--	-0.015	0.001	--	0.009	0.019	-0.001	0.000	0.001	0.004	--
		E	0.622	0.56	--	0.12	0.001	0.009	0.005	0.003	0.000	--	0.343	0.44	--	0.007	0.004	0.011	0.010	0.003	0.005	--
		F	0.530	0.47	--	0.018	0.004	0.007	0.008	0.004	0.001	--	0.251	0.035	--	0.013	0.007	0.009	0.012	0.004	0.006	--
		G	0.426	0.036	--	0.025	0.008	0.004	0.006	0.005	0.003	--	0.147	0.024	--	0.020	0.011	0.006	0.010	0.005	0.008	--
2	2	H	0.353	0.024	--	0.030	0.017	0.001	0.004	0.006	0.006	--	0.074	0.012	--	0.025	0.020	0.003	0.008	0.006	0.011	--
		I	0.304	0.016	--	0.030	0.025	0.000	0.001	0.005	0.010	--	0.025	0.004	--	0.025	0.025	0.002	0.005	0.005	0.015	--
		J	0.273	0.012	--	0.027	0.030	-0.001	-0.002	0.004	0.012	--	-0.006	0.000	--	0.022	0.033	0.001	0.002	0.004	0.017	--
		K	0.257	0.009	--	0.020	0.028	-0.002	-0.003	0.002	0.010	--	-0.022	-0.003	--	0.015	0.031	0.000	0.001	0.002	0.015	--
		E	0.121	0.023	--	0.002	0.000	0.003	0.000	0.001	0.001	--	0.114	0.024	--	0.002	0.001	0.004	0.005	0.001	0.003	--
		F	0.128	0.021	--	0.005	0.000	0.003	0.001	0.001	0.001	--	0.121	0.022	--	0.005	0.001	0.004	0.006	0.001	0.003	--
		G	0.108	0.017	--	0.007	0.001	0.002	0.001	0.001	0.001	--	0.101	0.018	--	0.007	0.002	0.003	0.006	0.001	0.003	--
		H	0.153	0.011	--	0.010	0.003	0.000	0.001	0.002	0.001	--	0.146	0.012	--	0.010	0.004	0.001	0.006	0.002	0.003	--
		I	0.031	0.008	--	0.012	0.007	-0.001	-0.001	0.002	0.001	--	0.024	0.009	--	0.012	0.008	0.000	0.004	0.002	0.003	--
		J	0.009	0.003	--	0.012	0.011	-0.002	-0.003	0.002	0.002	--	0.002	0.004	--	0.012	0.012	-0.001	0.002	0.002	0.004	--

		Vertical Deflection, in., at Indicated Gages																		
		Total									Rebound									
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	
1	E	0.121	0.023	--	0.002	0.000	0.003	0.000	0.001	0.001	0.114	0.024	--	0.002	0.001	0.004	0.004	0.005	0.001	0.003
	F	0.128	0.021	--	0.005	0.000	0.003	0.001	0.001	0.001	0.121	0.022	--	0.005	0.001	0.004	0.004	0.006	0.001	0.003
	G	0.108	0.017	--	0.007	0.001	0.002	0.001	0.001	0.001	0.101	0.018	--	0.007	0.002	0.003	0.003	0.006	0.001	0.003
	H	0.153	0.011	--	0.010	0.003	0.000	0.001	0.002	0.001	0.146	0.012	--	0.010	0.004	0.001	0.006	0.002	0.002	0.003
	I	0.031	0.008	--	0.012	0.007	-0.001	-0.001	0.002	0.001	0.024	0.009	--	0.012	0.008	0.000	0.004	0.004	0.002	0.003
2	J	0.009	0.003	--	0.012	0.011	-0.002	-0.003	0.002	0.002	0.002	0.004	--	0.009	0.019	-0.001	0.000	0.000	0.001	0.004
	K	-0.008	0.000	--	0.009	0.018	-0.002	-0.005	0.001	0.002	-0.015	0.001	--	0.007	0.004	0.011	0.010	0.003	0.003	0.005
	E	0.622	0.56	--	0.12	0.001	0.009	0.005	0.003	0.000	0.343	0.44	--	0.007	0.007	0.009	0.012	0.004	0.006	0.006
	F	0.530	0.47	--	0.018	0.004	0.007	0.008	0.004	0.001	0.251	0.035	--	0.013	0.007	0.011	0.006	0.010	0.005	0.008
	G	0.426	0.036	--	0.025	0.008	0.004	0.006	0.005	0.003	0.147	0.024	--	0.020	0.011	0.006	0.010	0.005	0.005	0.008
	H	0.353	0.024	--	0.030	0.017	0.001	0.004	0.006	0.006	0.074	0.012	--	0.025	0.020	0.003	0.008	0.006	0.006	0.011
	I	0.304	0.016	--	0.030	0.025	0.000	0.001	0.005	0.010	0.025	0.004	--	0.025	0.026	0.002	0.005	0.005	0.005	0.015
	J	0.273	0.012	--	0.027	0.030	-0.001	-0.002	0.004	0.012	-0.006	0.000	--	0.022	0.033	0.001	0.002	0.004	0.004	0.017
	K	0.257	0.009	--	0.020	0.028	-0.002	-0.003	0.002	0.010	-0.022	-0.003	--	0.015	0.031	0.000	0.001	0.002	0.002	0.015

Table A10(Continued)

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells																		
			P ₁	P ₂	P ₃	P ₄	P ₅	Total		P ₆	P ₇	P ₈	P ₉	P ₁₀	Rebound					P ₉	P ₁₀
1	1	H	21.93	12.30	18.04	5.94	0.18	15.13	7.28	4.07	7.87	--	--	--	--	--	--	7.28	7.94	7.69	--
		J	5.62	10.94	20.27	9.50	0.00	3.61	6.33	5.50	10.84	--	--	--	--	--	--	6.33	9.37	10.66	--
		K	2.58	8.16	13.06	9.50	0.35	1.13	4.86	1.63	9.23	--	--	--	--	--	--	4.86	5.50	9.06	--
5	1	E	8.48	4.02	-0.34	-1.19	0.69	16.36	4.64	-0.82	1.66	--	--	--	--	--	--	4.43	-2.66	1.49	--
		F	11.06	5.97	0.00	1.19	0.69	22.34	6.55	0.61	3.50	--	--	--	--	--	--	6.34	-1.22	3.33	--
		G	11.25	7.43	4.12	1.19	0.52	23.02	8.44	8.15	6.55	--	--	--	--	--	--	8.23	6.32	6.39	--
		H	12.17	8.65	7.22	1.90	0.35	25.51	9.50	11.40	10.49	--	--	--	--	--	--	9.29	9.57	10.32	--
		I	7.56	8.40	4.81	3.56	0.35	18.01	9.50	10.98	13.46	--	--	--	--	--	--	17.83	9.15	13.29	--
		J	3.32	7.55	8.25	5.46	0.35	7.78	8.66	13.64	14.86	--	--	--	--	--	--	7.56	8.45	11.69	--
		K	1.11	5.48	5.67	4.75	0.35	3.04	6.76	11.40	14.51	--	--	--	--	--	--	2.82	9.57	14.34	--

Row	Load Point	Location	Vertical Deflection, in., at Indicated Gages									
			D ₁	D ₂	D ₃	D ₄	D ₅	Total	D ₆	D ₇	D ₈	D ₉
1	1	H	-0.011	0.006	--	0.011	0.005	0.000	0.000	0.001	0.002	-0.001
		J	-0.076	-0.003	--	0.011	0.015	-0.002	0.000	0.000	0.001	0.002
		K	-0.093	-0.005	--	0.009	0.022	-0.002	-0.002	-0.002	0.001	0.003
5	1	E	0.316	0.111	--	0.009	0.003	0.021	0.010	0.002	0.000	0.000
		F	0.378	0.118	--	0.017	0.003	0.020	0.014	0.004	0.000	0.000
		G	0.321	0.102	--	0.029	0.007	0.015	0.018	0.007	0.002	0.002
		H	0.207	0.074	--	0.042	0.019	0.009	0.016	0.009	0.006	0.006
		I	0.133	0.054	--	0.051	0.036	0.005	0.012	0.010	0.012	0.012
		J	0.084	0.042	--	0.054	0.048	0.002	0.007	0.010	0.021	0.021
		K	0.052	0.033	--	0.048	0.057	0.000	0.003	0.009	0.035	0.035

Vertical Deflection, in., at Indicated Gages

Rebound

Row	Load Point	Location	R ₁	R ₂	R ₃	R ₄	R ₅	Total	R ₆	R ₇	R ₈	R ₉
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
1	1	H	0.044	0.011	--	0.013	0.005	0.001	0.002	0.002	0.002	0.000
		J	-0.021	0.002	--	0.013	0.015	-0.001	0.001	0.001	0.001	0.003
		K	-0.038	0.000	--	0.011	0.022	-0.001	-0.001	-0.001	0.001	0.004
5	1	E	0.308	0.078	--	-0.005	-0.006	0.021	0.011	0.011	0.001	0.000
		F	0.370	0.085	--	0.003	-0.006	0.020	0.015	0.015	0.003	0.000
		G	0.313	0.069	--	0.015	-0.002	0.015	0.019	0.019	0.006	0.002
		H	0.199	0.041	--	0.028	0.010	0.009	0.017	0.017	0.008	0.006
		I	0.125	0.021	--	0.037	0.027	0.005	0.013	0.013	0.009	0.012
		J	0.076	0.003	--	0.040	0.039	0.002	0.008	0.008	0.009	0.021
		K	0.044	0.000	--	0.034	0.048	0.000	0.004	0.004	0.008	0.035

(Continued)

(2 of 4 sheets)

Table A10 (Continued)

Rev	Load Point	Loca- tion	Vertical Pressure, psi, at Indicated Cells										Rebound									
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
5	2	E	4.42	4.63	-0.35	-1.19	0.00	22.35	6.76	1.43	3.68	--	5.53	5.60	1.03	-0.71	0.34	21.90	6.97	-3.66	3.85	--
		F	4.79	5.72	0.00	0.00	0.00	23.48	8.45	17.11	7.00	--	5.90	6.69	1.38	0.48	0.34	23.03	8.66	12.12	7.17	--
		G	3.87	6.09	0.51	0.59	0.00	25.28	9.08	19.35	9.97	--	4.98	7.06	1.89	1.07	0.34	24.83	9.29	14.26	10.14	--
		H	2.03	5.97	0.85	2.37	0.00	15.30	8.97	17.11	12.68	--	3.14	6.94	2.23	2.85	0.34	14.85	9.18	12.02	12.85	--
		I	0.37	4.99	0.17	2.37	-0.17	5.76	7.60	23.22	13.81	--	1.48	5.96	1.55	2.85	0.17	5.31	7.81	18.13	13.98	--
7	1	J	-0.28	3.78	-0.35	1.19	-0.17	2.94	6.02	12.02	13.03	--	0.83	4.75	1.03	1.67	0.17	2.49	6.23	6.93	13.20	--
		K	-0.74	2.31	-0.86	1.19	-0.17	1.58	4.22	4.89	9.09	--	0.37	3.28	0.52	1.67	0.17	1.13	4.43	-0.20	9.26	--
		E	1.47	1.71	0.00	-2.37	0.00	5.42	3.38	-0.81	1.57	--	1.84	2.68	0.00	-1.18	0.00	7.00	3.59	3.67	1.57	--
		G	2.58	2.68	0.18	-1.19	0.00	7.90	5.91	0.00	4.28	--	2.95	3.65	0.18	0.00	0.00	9.48	6.12	4.48	4.28	--
		I	1.10	2.68	1.72	0.00	0.00	4.29	7.55	0.41	8.04	--	1.47	3.65	1.72	1.19	0.00	5.87	7.54	4.89	8.04	--
		K	0.18	1.46	0.35	0.00	0.00	-0.68	4.01	-2.44	7.52	--	0.55	2.43	0.35	1.19	0.00	0.90	4.22	2.04	7.52	--

		Vertical Deflection, in., at Indicated Gages																		
		Total									Rebound									
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	
5	2	E	0.602	0.181	--	0.029	-0.002	0.040	0.032	0.011	0.001	0.370	0.138	--	0.006	-0.001	0.036	0.029	0.006	0.009
		F	0.479	0.150	--	0.050	0.008	0.032	0.038	0.017	0.008	0.247	0.107	--	0.027	0.009	0.028	0.035	0.012	0.011
		G	0.375	0.114	--	0.066	0.028	0.023	0.037	0.022	0.019	0.143	0.071	--	0.043	0.029	0.019	0.034	0.017	0.022
		H	0.297	0.082	--	0.082	0.079	0.015	0.030	0.025	0.035	0.065	0.039	--	0.059	0.080	0.011	0.027	0.020	0.038
		I	0.252	0.061	--	0.086	0.093	0.010	0.019	0.025	0.054	0.020	0.018	--	0.063	0.094	0.006	0.016	0.020	0.057
7	1	J	0.234	0.052	--	0.077	0.093	0.007	0.013	0.022	0.062	0.002	0.009	--	0.054	0.094	0.003	0.010	0.017	0.065
		K	0.221	0.045	--	0.059	0.094	0.005	0.007	0.016	0.059	-0.011	0.002	--	0.036	0.095	0.001	0.004	0.011	0.062
		E	0.063	0.203	--	0.014	-0.002	0.121	0.068	0.011	0.012	0.127	0.142	--	-0.018	-0.012	0.084	0.021	-0.010	-0.062
		G	0.031	0.186	--	0.056	0.007	0.110	0.092	0.036	0.027	0.095	0.125	--	0.024	-0.003	0.073	0.045	0.045	-0.047
		I	-0.038	0.108	--	0.098	0.091	0.065	0.089	0.061	0.139	0.026	0.047	--	0.066	0.081	0.028	0.042	0.040	0.065
	K	-0.070	0.072	--	0.085	0.109	0.043	0.060	0.053	0.213	-0.006	0.011	--	0.053	0.099	0.006	0.013	0.032	0.139	

Table A10(Continued)

Row	Load Point	Loca- tion	Vertical Pressure, psi, at Indicated Cells									
			Total					Rebound				
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
7	2	E	1.47	1.70	0.18	2.38	0.00	3.72	3.80	-0.81	1.92	--
		G	1.11	1.95	0.52	2.38	0.00	3.05	4.85	0.31	4.20	--
		I	0.55	1.58	0.35	1.19	0.00	0.68	3.90	-0.20	5.07	--
		K	0.18	0.97	0.18	1.19	0.00	-0.57	2.53	-0.81	4.20	--
11	1	E	0.55	0.73	0.00	0.59	0.00	1.24	1.90	-0.51	0.70	--
		G	0.92	1.10	0.18	0.59	0.00	3.16	3.16	0.10	1.84	--
		I	0.55	1.34	0.18	0.59	0.00	2.03	3.80	2.14	3.68	--
		K	0.18	1.10	0.18	0.59	0.00	0.68	2.95	0.91	3.85	--
2		E	0.37	0.49	0.00	-1.19	0.18	1.47	1.91	-0.10	1.04	--
		G	0.37	0.73	0.00	-1.19	0.18	1.36	2.54	0.71	2.09	--
		I	0.18	0.44	0.09	0.00	0.18	0.57	2.12	0.71	2.53	--
		K	0.00	0.25	0.00	0.00	0.00	0.23	1.06	0.10	1.66	--

Row	Load Point	Loca- tion	Vertical Deflection, in., at Indicated Gages									
			Total					Rebound				
			d ₁	d ₂	d ₃	d ₄	d ₅	d ₆	d ₇	d ₈	d ₉	d ₁₀
7	2	E	0.084	0.153	--	0.027	-0.003	0.173	0.065	0.032	-0.013	--
		G	-0.008	0.086	--	0.065	0.032	0.110	0.065	0.072	0.077	--
		I	-0.034	0.041	--	0.072	0.086	0.065	0.094	0.084	0.313	--
		K	-0.067	0.059	--	0.054	0.102	0.058	0.010	0.064	0.436	--
11	1	E	0.050	0.076	--	0.004	-0.023	0.209	0.059	0.010	-0.031	--
		G	0.086	0.065	--	0.023	-0.021	0.203	0.063	0.046	-0.025	--
		I	0.006	0.023	--	0.050	0.018	0.126	0.062	0.088	0.135	--
		K	-0.005	0.001	--	0.045	0.045	0.086	0.018	0.082	0.278	--
2		E	0.003	0.033	--	0.009	-0.017	0.185	0.083	0.027	-0.015	--
		G	-0.005	0.013	--	0.023	-0.004	0.111	0.084	0.065	0.057	--
		I	-0.012	-0.003	--	0.026	0.020	0.056	0.048	0.074	0.386	--
		K	-0.015	-0.011	--	0.011	0.013	0.034	0.010	0.044	0.464	--

(4 of 4 sheets)

Table A-11
Multiple-wheel Heavy Gear Load Flexible Pavement Test, Static Instrumentation Leading Data
Item 4; Load Condition: 60 kips per wheel, Twin Tandem, 200 psi

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells										Rebound									
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
1	1	E	1.21	12.01	18.08	5.75	3.72	-0.54	11.12	--	4.31	1.12	1.41	11.63	16.55	6.46	1.57	-0.18	11.01	--	4.91	0.92
		F	1.00	12.96	26.58	7.42	8.61	2.74	12.27	--	5.69	2.76	1.20	12.58	25.05	8.13	6.46	3.10	12.16	--	6.29	2.56
		G	0.80	12.58	19.17	9.33	17.61	0.19	11.70	--	7.24	7.89	1.00	12.20	17.64	10.04	15.46	0.55	11.59	--	7.84	7.69
		H	1.00	10.43	29.85	10.29	21.71	-0.36	9.52	--	8.10	11.06	1.20	10.10	28.32	11.00	19.56	0.00	9.41	--	8.70	10.86
		I	0.60	6.86	23.53	10.29	22.50	-0.36	6.31	--	8.10	11.57	0.80	6.48	22.00	11.00	20.35	0.00	6.20	--	8.70	11.37
1	2	J	0.60	3.62	6.32	8.62	25.04	0.36	3.55	--	6.89	13.01	0.80	3.24	4.79	9.33	22.89	0.00	3.44	--	7.49	12.81
		K	0.60	2.28	3.05	6.94	20.34	-0.72	2.18	--	5.69	10.86	0.80	1.90	1.52	7.65	18.19	-0.36	2.07	--	6.29	10.36
		E	-1.20	12.96	34.20	8.49	8.51	227.42	15.03	--	8.01	6.04	-0.40	13.34	32.68	8.97	8.31	227.60	15.03	--	8.10	5.63
		F	-0.40	12.39	29.19	10.76	18.00	3.83	14.45	--	10.25	14.24	0.40	12.77	27.67	11.24	17.80	4.01	14.45	--	10.34	13.83
		G	-0.80	9.15	46.40	11.48	22.50	3.10	10.55	--	11.11	18.54	0.00	9.53	44.88	11.96	22.30	3.28	10.55	--	11.20	18.13
1		H	-0.80	5.43	21.35	11.00	23.08	2.01	6.43	--	10.68	18.54	0.00	5.81	19.83	11.48	22.88	2.19	6.43	--	10.77	12.13
		I	-0.40	2.86	7.19	9.09	24.65	0.91	3.44	--	9.04	20.18	0.40	3.24	5.67	9.57	24.45	1.09	3.44	--	9.13	19.77
		J	-0.80	1.33	3.70	6.46	12.91	0.37	1.49	--	6.72	12.40	0.00	1.71	2.18	6.94	12.71	0.55	1.49	--	6.81	11.99
		K	-0.80	0.57	3.27	4.30	5.87	0.18	0.69	--	4.74	5.84	0.00	0.95	1.75	4.78	5.67	0.36	0.69	--	4.83	5.43

Row	Load Point	Location	Vertical Deflection, in., at Indicated Gages										Rebound									
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
1	1	E	--	0.043	0.014	0.005	0.002	0.005	-0.002	--	0.000	--	--	0.054	0.015	0.013	0.013	0.010	0.011	0.008	--	0.003
		F	--	0.038	0.019	0.007	0.003	0.005	-0.001	--	0.000	--	--	0.049	0.020	0.015	0.015	0.011	0.011	0.009	--	0.003
		G	--	0.026	0.021	0.014	0.007	0.002	-0.001	--	0.001	--	--	0.037	0.022	0.022	0.022	0.015	0.008	0.009	--	0.004
		H	--	0.017	0.021	0.021	0.013	-0.001	-0.002	--	0.002	--	--	0.028	0.022	0.029	0.029	0.021	0.005	0.008	--	0.005
		I	--	0.007	0.017	0.026	0.022	-0.003	-0.003	--	0.003	--	--	0.018	0.018	0.034	0.034	0.030	0.003	0.007	--	0.006
1	2	J	--	-0.002	0.011	0.023	0.035	-0.005	0.004	--	0.005	--	--	0.009	0.012	0.031	0.043	0.043	0.001	0.006	--	0.008
		K	--	-0.006	0.007	0.018	0.041	-0.006	-0.005	--	0.005	--	--	0.005	0.008	0.026	0.049	0.049	0.000	0.005	--	0.008
		E	--	0.045	0.040	0.022	0.006	0.010	0.007	--	-0.001	--	--	0.069	0.035	0.020	0.020	-0.003	0.016	0.011	--	0.004
		F	--	0.036	0.042	0.033	0.015	0.007	0.007	--	0.002	--	--	0.060	0.037	0.031	0.031	0.006	0.013	0.011	--	0.007
		G	--	0.019	0.040	0.044	0.028	0.003	0.006	--	0.004	--	--	0.043	0.035	0.042	0.042	0.019	0.009	0.010	--	0.009
1		H	--	0.003	0.033	0.049	0.053	-0.001	0.004	--	0.008	--	--	0.027	0.028	0.047	0.047	0.044	0.005	0.008	--	0.013
		I	--	-0.008	0.025	0.049	0.075	-0.004	0.003	--	0.012	--	--	0.016	0.020	0.047	0.066	0.066	0.002	0.007	--	0.017
		J	--	-0.014	0.016	0.039	0.067	-0.005	0.000	--	0.012	--	--	0.010	0.011	0.037	0.078	0.078	0.001	0.004	--	0.017
		K	--	-0.017	0.010	0.026	0.061	-0.005	-0.001	--	0.010	--	--	0.007	0.005	0.024	0.072	0.072	0.001	0.003	--	0.015

(Continued)

(1 of 4 sheets)

Table A11 (Continued)

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells																			
			Total					Rebound														
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀										
1	1	E	-1.01	12.87	17.54	6.22	1.56	-0.72	11.24	--	4.48	0.92	0.40	12.68	19.50	6.22	1.17	-0.72	11.12	--	4.82	0.82
		F	-1.01	14.49	26.58	9.09	8.21	1.10	12.62	--	6.55	3.18	0.40	14.30	28.54	9.09	7.82	1.10	12.50	--	6.89	3.08
		H	-1.01	10.48	30.72	12.32	23.08	-0.36	8.72	--	8.79	11.06	0.40	10.29	32.68	12.32	22.69	-0.36	8.60	--	9.13	12.96
5	1	E	0.40	8.96	1.92	4.78	1.96	-1.09	15.71	--	6.20	1.23	0.00	9.53	8.06	5.74	3.53	-1.09	15.83	--	6.03	0.61
		F	0.60	10.10	7.84	6.94	4.69	1.46	17.54	--	8.96	5.12	0.20	10.67	11.98	7.90	6.26	1.46	17.66	--	8.79	4.50
		G	0.60	9.91	5.78	8.37	9.98	-0.36	16.86	--	11.02	12.71	0.20	10.48	9.92	9.33	11.55	-0.36	16.98	--	10.85	12.09
		H	0.40	7.62	10.13	9.33	14.03	-0.54	12.84	--	12.57	19.06	0.00	8.19	14.27	10.29	15.65	-0.54	12.96	--	12.40	18.44
		I	0.40	4.57	5.01	9.09	14.28	-0.36	7.45	--	12.75	19.67	0.00	5.14	9.15	10.05	15.85	-0.36	7.57	--	12.58	19.05
		J	0.40	2.29	0.00	7.65	15.45	-0.36	3.78	--	10.85	21.83	0.00	2.86	4.14	8.61	17.02	-0.36	3.90	--	10.68	21.21
		K	0.40	0.95	-1.31	5.86	9.78	-0.36	1.72	--	8.61	16.40	0.00	1.52	2.93	5.82	11.35	-0.36	1.84	--	8.44	15.78

		Vertical Deflection, in., at Indicated Gages																		
		Total									Rebound									
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	
1	1	E	--	0.054	0.014	0.003	-0.001	0.007	0.002	--	--	0.069	0.018	0.010	0.008	0.010	0.004	--	--	0.000
		F	--	0.043	0.019	0.009	0.002	0.005	0.003	--	--	0.058	0.023	0.016	0.011	0.008	0.005	--	--	0.001
		H	--	0.016	0.019	0.024	0.014	0.000	0.003	--	--	0.031	0.023	0.031	0.023	0.003	0.005	--	--	0.003
5	1	E	--	0.135	0.050	0.018	0.006	0.042	0.010	--	--	0.046	0.027	-0.032	-0.039	0.052	0.009	--	--	0.001
		F	--	0.142	0.071	0.040	0.011	0.035	0.016	--	--	0.053	0.048	-0.010	-0.034	0.045	0.015	--	--	0.003
		G	--	0.128	0.086	0.071	0.023	0.028	0.018	--	--	0.039	0.063	0.021	-0.022	0.038	0.017	--	--	0.006
		H	--	0.099	0.069	0.095	0.055	0.019	0.013	--	--	0.010	0.066	0.045	0.010	0.029	0.017	--	--	0.012
		I	--	0.065	0.080	0.104	0.115	0.009	0.015	--	--	-0.024	0.057	0.054	0.070	0.019	0.014	--	--	0.021
		J	--	0.034	0.059	0.112	0.179	0.002	0.010	--	--	-0.055	0.036	0.062	0.134	0.012	0.009	--	--	0.031
		K	--	0.022	0.044	0.105	0.207	-0.001	0.006	--	--	-0.067	0.021	0.055	0.162	0.009	0.005	--	--	0.034

(Continued)

(2 of 4 sheets)

Table All(Continued)

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells										Rebound											
			P ₁	P ₂	P ₃	P ₄	Total	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	
5	2	E	0.00	6.86	2.62	5.74	3.13	222.15	16.29	--	--	8.96	7.55	-2.01	7.24	2.62	6.22	3.91	222.15	16.52	--	--	9.30	7.35
		F	0.00	6.29	3.71	6.70	5.09	--	12.96	--	--	11.20	16.98	-2.01	6.67	3.71	7.18	5.87	--	13.19	--	--	11.54	16.78
		G	-0.80	4.76	2.83	7.18	6.45	1.83	11.36	--	--	12.23	21.59	-2.81	5.14	2.83	7.66	7.24	1.83	11.59	--	--	12.57	21.39
		H	-0.40	2.76	1.53	6.70	7.05	1.46	6.43	--	--	11.72	22.31	-2.41	3.14	1.53	3	7.83	1.46	6.66	--	--	12.06	22.11
		I	-0.20	1.52	0.87	5.74	6.17	1.10	3.44	--	--	9.99	24.15	-2.21	1.90	0.87	6.22	7.95	1.10	3.67	--	--	10.33	23.95
7	1	J	-0.20	0.57	0.22	4.19	3.53	0.73	1.61	--	--	7.41	15.34	-2.21	0.95	0.22	4.67	4.31	0.73	1.84	--	--	7.75	15.14
		K	-0.20	0.00	0.22	2.63	1.37	0.37	0.69	--	--	5.00	6.53	-2.21	0.38	0.22	3.11	2.15	0.37	0.92	--	--	5.34	6.33
		E	0.20	3.24	0.87	2.15	0.98	-1.46	11.12	--	--	4.65	1.33	0.00	4.01	0.98	3.23	1.57	-1.82	11.46	--	--	5.34	2.46
		G	0.00	3.24	3.92	3.47	2.35	--	11.35	--	--	8.10	7.68	-0.20	4.01	4.03	4.55	2.94	--	11.69	--	--	8.79	8.61
		I	-0.40	1.33	1.09	3.23	3.91	-1.10	5.39	--	--	8.70	11.17	-0.60	2.10	1.20	4.31	4.50	-1.46	5.73	--	--	9.39	12.30
		K	-0.40	0.00	0.44	1.79	1.76	-1.10*	1.49	--	--	5.68	7.89	-0.60	0.77	0.55	2.87	2.35	-1.46	1.83	--	--	6.37	9.02

Row	Load Point	Location	Vertical Deflection, in., at Indicated Gages										Rebound									
			D ₁	D ₂	D ₃	D ₄	Total	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	
5	2	E	--	0.111	0.116	0.043	0.010	0.065	0.030	--	--	0.007	--	0.159	0.068	0.068	0.128	-0.057	0.076	0.027	--	0.002
		F	--	0.082	0.137	0.071	0.024	0.051	0.035	--	--	0.015	--	0.130	0.109	0.109	0.156	-0.043	0.062	0.032	--	0.010
		G	--	0.044	0.141	0.072	0.099	0.034	0.034	--	--	0.028	--	0.092	0.113	0.113	0.157	0.032	0.045	0.031	--	0.023
		H	--	0.021	0.123	0.072	0.210	0.016	0.029	--	--	0.049	--	0.049	0.095	0.095	0.157	0.143	0.027	0.026	--	0.044
		I	--	-0.031	0.095	0.072	0.291	0.006	0.021	--	--	0.065	--	0.017	0.067	0.067	0.157	0.224	0.017	0.018	--	0.060
7	1	J	--	-0.053	0.068	0.061	0.344	0.000	0.014	--	--	0.074	--	-0.005	0.040	0.021	0.108	0.303	0.008	0.006	--	0.069
		K	--	-0.066	0.049	0.023	0.370	-0.003	0.009	--	--	0.070	--	-0.018	0.021	0.021	0.108	0.303	0.008	0.006	--	0.065
		E	--	0.162	0.093	0.025	0.003	0.195	0.040	--	--	0.005	--	0.182	0.057	0.057	0.015	-0.060	0.146	0.026	--	-0.029
		G	--	0.147	0.159	0.047	0.036	0.162	0.064	--	--	0.028	--	0.167	0.123	0.123	0.037	-0.027	0.123	0.050	--	-0.006
		I	--	0.075	0.150	0.069	0.235	0.083	0.060	--	--	0.114	--	0.095	0.114	0.114	0.059	0.172	0.044	0.046	--	0.080
		K	--	0.021	0.086	0.063	0.389	0.045	0.037	--	--	0.179	--	0.041	0.050	0.050	0.053	0.326	0.006	0.023	--	0.145

* P6, Intermittent.

(Continued)

(3 of 4 sheets)

Table A11(Concluded)

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells										Rebound									
			Total																			
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
7	2	E	0.60	2.39	1.20	2.16	1.18	-0.73	8.02	--	5.34	2.36	1.80	2.58	1.31	2.40	1.27	0.36	8.48	--	5.94	2.97
		G	0.20	1.53	0.98	2.63	2.35	-0.36	5.27	--	6.89	5.12	1.40	1.72	1.09	2.87	2.44	0.73	5.73	--	7.49	5.73
		I	-0.20	0.58	0.33	1.92	1.96	-0.73	1.83	--	5.34	5.12	1.00	0.77	0.44	2.16	2.05	0.36	2.29	--	5.94	5.73
		K	-0.20	3.24	0.11	0.72	0.79	-1.09	0.00	--	2.50	1.13	1.00	3.43	0.22	0.96	0.88	0.00	0.46	--	3.10	1.74
11	1	E	1.00	1.34	0.44	0.96	0.29	9.83	4.58	--	2.58	0.82	0.40	1.53	0.33	1.31	0.39	9.47	5.39	--	3.36	1.23
		G	1.00	1.14	0.44	1.20	0.88	0.36	4.24	--	4.04	2.25	0.40	1.33	0.33	1.55	0.98	0.00	5.05	--	4.82	2.66
		I	0.80	0.58	0.44	0.96	1.17	0.00	2.06	--	4.04	3.79	0.20	0.77	0.33	1.31	1.27	-0.36	2.87	--	4.82	4.20
		K	0.60	0.00	0.22	0.48	0.68	0.00	0.23	--	2.49	1.64	0.00	0.19	0.11	0.83	0.78	-0.36	1.04	--	3.27	2.05
2		E	0.40	0.77	0.11	0.59	0.39	-0.36	3.22	--	2.41	1.02	0.40	-0.19	-2.07	-0.24	-0.39	--	1.50	--	1.20	-0.62
		G	0.40	0.57	0.11	0.71	0.59	-0.36	2.18	--	2.93	2.05	0.40	-0.39	-2.07	-0.12	-0.19	--	0.46	--	1.72	0.41
		I	0.40	0.19	0.11	0.35	0.39	-0.36	0.81	--	2.24	1.84	0.40	-0.77	-2.07	-0.48	-0.39	--	-0.91	--	1.03	0.20
		K	0.40	0.00	0.11	0.11	0.19	-0.36	-0.11	--	1.03	0.71	0.40	-0.96	-2.07	-0.72	-0.59	--	-1.83	--	-0.18	-0.93

Vertical Deflection, in., at Indicated Gages																						
		Total									Rebound											
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉			
7	2	E	--	0.186	0.130	0.089	0.012	0.283	0.077	--	0.015	--	0.289	0.106	0.151	-0.054	0.186	0.063	--	-0.042		
		G	--	0.097	0.148	0.161	0.133	0.222	0.089	--	0.110	--	0.200	0.128	0.223	0.067	0.125	0.075	--	0.053		
		I	--	-0.004	0.094	0.162	0.343	0.148	0.065	--	0.253	--	0.099	0.074	0.224	0.277	0.051	0.051	--	0.196		
		K	--	-0.044	0.048	0.090	0.378	0.116	0.039	--	0.294	--	0.057	0.028	0.152	0.312	0.019	0.025	--	0.237		
11	1	E	--	0.158	0.061	0.014	-0.003	0.189	0.065	--	0.000	--	0.238	0.069	0.054	0.026	0.127	0.042	--	-0.061		
		G	--	0.097	0.091	0.118	0.020	0.183	0.100	--	0.042	--	0.177	0.099	0.158	0.049	0.121	0.077	--	-0.019		
		I	--	-0.013	0.062	0.157	0.123	0.133	0.092	--	0.222	--	0.067	0.070	0.197	0.152	0.071	0.068	--	0.161		
		K	--	-0.065	0.030	0.132	0.192	0.088	0.057	--	0.345	--	0.015	0.038	0.172	0.221	0.026	0.034	--	0.284		
2		E	--	0.048	0.045	0.033	0.003	0.125	0.078	--	0.012	--	-0.101	0.039	0.032	-0.002	0.260	0.088	--	0.035		
		G	--	-0.008	0.045	0.078	0.032	0.105	0.087	--	0.119	--	-0.0157	0.039	0.057	0.027	0.240	0.097	--	0.142		
		I	--	-0.051	0.020	0.080	0.081	0.059	0.059	--	0.297	--	-0.200	0.014	0.059	0.076	0.194	0.069	--	0.320		
		K	--	-0.067	-0.003	0.017	0.077	0.034	0.031	--	0.334	--	-0.216	-0.009	-0.004	0.072	0.169	0.041	--	0.357		

(4 of 4 sheets)

Table A-12
Multiple-Wheel Heavy Gear Load Flexible Pavement Test, Static Instrumentation Loading Data
Item 3: Load Condition: 30 kips per wheel, 6 wheels, 100 psi

Rev	Loca- tion	Vertical Pressure, psi, at Indicated Cells										Rebound									
		Total																			
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
1 & 3	1 & 2	11.58	5.60	3.69	2.61	0.87	9.36	4.11	0.10	2.89	-21.93	11.25	4.74	3.76	1.42	0.18	8.35	3.27	0.51	2.15	0.66
1	1	13.27	7.77	9.79	4.04	0.69	12.07	5.06	2.95	4.29	-22.12	12.54	6.21	9.88	2.43	0.00	11.06	4.22	3.36	3.50	0.47
1 & 3	1 & 2	13.08	7.67	8.93	5.46	0.69	13.54	5.49	2.03	5.77	-22.49	12.35	6.81	9.02	4.27	0.00	12.53	4.65	2.44	4.98	0.10
		8.75	7.80	8.24	7.01	0.69	10.15	5.70	3.36	7.08	-22.40	8.02	6.94	8.33	5.82	0.00	5.14	4.86	3.77	6.29	0.19
		4.24	7.19	10.82	7.84	0.69	4.96	5.27	6.72	8.13	-22.59	3.51	6.33	10.91	6.65	0.00	3.95	4.43	7.13	7.34	0.00
		2.30	5.85	5.75	7.96	0.69	2.70	4.43	3.05	8.13	-22.77	1.57	4.99	5.84	6.77	0.00	1.69	3.59	3.46	7.34	-0.18
		1.47	4.51	1.54	6.65	0.69	1.80	3.58	0.30	6.73	-22.31	0.74	3.65	1.63	5.46	0.00	0.79	2.74	0.71	5.94	0.28
1	1	0.92	2.56	0.17	3.56	0.69	1.12	2.21	-0.31	3.50	-22.49	0.19	1.70	0.26	2.37	0.00	0.11	1.37	0.10	2.71	0.10

Rev	Loca- tion	Vertical Deflection, in., at Indicated Gages										Rebound									
		Total																			
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	
1 & 3	1 & 2	0.113	0.023	0.019	0.004	0.002	0.003	0.004	0.001	0.001		0.129	0.026	0.027	0.006	0.028	0.004	0.004	0.002	0.002	
1	1	0.081	0.019	0.029	0.007	0.006	0.002	0.004	0.001	0.001		0.097	0.022	0.037	0.009	0.032	0.003	0.004	0.002	0.002	
		0.050	0.013	0.035	0.010	0.011	0.001	0.004	0.002	0.002		0.066	0.016	0.043	0.012	0.037	0.002	0.004	0.003	0.003	
		0.026	0.008	0.027	0.012	0.018	0.000	0.003	0.002	0.003		0.042	0.011	0.035	0.014	0.044	0.001	0.003	0.003	0.004	
		0.008	0.003	0.013	0.013	0.028	0.000	0.001	0.002	0.004		0.024	0.006	0.021	0.015	0.054	0.001	0.001	0.003	0.005	
		0.000	0.001	0.004	0.011	0.036	0.001	0.000	0.001	0.005		0.016	0.004	0.012	0.013	0.062	0.000	0.000	0.002	0.157	
		-0.006	0.000	-0.001	0.008	0.037	0.002	0.000	0.001	0.005		0.010	0.003	0.007	0.010	0.063	0.003	0.000	0.002	0.006	
1	1	-0.100	-0.001	-0.005	0.002	0.013	0.004	0.003	0.000	0.001		0.006	0.002	0.003	0.004	0.039	0.005	0.003	0.001	0.002	

Table A12 (Continued)

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells									
			Total					Rebound				
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
1,3,5	2,1,2	E	11.24	4.37	3.44	1.67	0.00	11.29	4.22	2.75	2.80	0.65
	2 & 2	F	13.08	6.09	13.49	2.85	0.00	12.53	5.17	7.74	4.37	0.56
	2,1,2	G	14.19	6.82	11.86	4.28	0.00	13.21	5.81	6.82	6.29	0.47
		H	8.84	6.82	11.95	5.59	70.02	8.70	5.81	7.02	7.69	27.18
		I	4.24	6.21	19.25	6.65	-2.77	3.95	5.38	9.57	8.57	3.47
		J	2.39	5.00	9.97	6.89	-2.43	1.70	4.43	5.29	8.39	2.06
		K	1.47	3.66	3.01	5.59	70.02	0.68	3.38	2.14	6.56	21.18
2 & 2		N	1.01	1.83	1.21	2.50	-4.16	0.12	1.90	1.42	2.97	2.62

Row	Load Point	Location	Vertical Pressure, in., at Indicated Gages									
			Total					Rebound				
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
1,3,5	2,1,2	E	0.226	0.047	0.000	0.009	0.006	0.008	0.008	0.002	-0.004	
	2 & 2	F	0.165	0.041	0.000	0.014	0.015	0.006	0.009	0.003	-0.002	
	2,1,2	G	0.122	0.030	0.000	0.019	0.028	0.003	0.009	0.004	0.001	
		H	0.093	0.019	0.000	0.023	0.044	0.001	0.006	0.005	0.004	
		I	0.076	0.013	0.000	0.025	0.062	0.000	0.002	0.005	0.008	
		J	0.066	0.009	0.000	0.022	0.062	-0.001	-0.002	0.004	0.010	
		K	0.061	0.007	0.000	0.027	0.153	0.000	-0.004	0.003	0.010	
2 & 2		N	0.057	0.006	0.000	0.009	0.083	0.000	-0.004	0.001	0.001	

(2 of 7 sheets)

(Continued)

Table A12 (Continued)

Row	Load Location	Vertical Pressure, psi, at Indicated Cells									
		Total									
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
5 & 6	1 & 2	E	7.19	3.90	1.03	1.07	11.51	4.22	0.91	2.62	0.19
5	1	F	11.34	5.73	3.09	2.73	13.09	6.02	-17.32	4.98	-22.87
5 & 6	1 & 2	G	13.09	6.33	3.52	3.80	13.54	6.65	-18.54	5.90	-24.37
		H	8.30	6.46	8.07	4.99	8.91	6.65	-18.23	8.39	-25.12
		I	3.97	3.53	16.58	5.94	4.17	6.23	-17.01	9.26	-25.31
		J	2.03	5.00	8.76	6.65	1.80	5.17	-20.07	8.91	-25.31
		K	1.29	3.78	1.89	5.59	0.90	4.12	-23.22	7.16	-25.40
5	1	N	0.93	2.07	0.17	2.73	0.22	2.43	-24.14	3.14	-25.12

Row	Load Location	Vertical Deflection, in., at Indicated Gages									
		Total									
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
5 & 6	1 & 2	E	0.089	0.065	0.000	0.013	0.007	0.020	0.016	0.002	0.001
5	1	F	0.063	0.057	0.109	0.023	0.021	0.019	0.031	0.006	0.004
5 & 6	1 & 2	G	0.028	0.040	0.000	0.028	0.044	0.011	0.035	0.007	0.011
		H	0.002	0.028	0.108	0.035	0.076	0.008	0.032	0.011	0.019
		I	-0.018	0.018	0.000	0.035	0.097	0.003	0.017	0.010	0.028
		J	-0.028	0.012	0.000	0.031	0.128	0.001	0.009	0.005	0.037
		K	-0.033	0.011	0.029	0.026	0.166	0.001	0.006	0.007	0.039
5	1	N	-0.037	0.009	0.019	0.013	0.081	0.000	0.003	0.003	0.016

(Continued)

(3 of 7 sheets)

Table A12(Continued)

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells										Vertical Deflection, in., at Indicated Gages									
			Total					Rebound					Total					Rebound				
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
6	1	E	4.33	3.05	0.34	0.71	0.00	10.72	4.01	2.55	2.71	0.09	4.49	3.17	0.43	1.19	0.00	9.93	4.01	-0.51	2.62	-2.91
		F	6.82	3.78	0.77	1.18	0.00	12.52	4.86	7.54	4.11	0.09	7.38	3.90	0.86	1.66	0.00	11.72	4.86	4.48	4.02	-2.91
		G	8.57	4.26	1.46	1.90	0.00	14.10	5.49	7.13	5.77	0.00	9.13	4.38	1.55	2.38	0.00	13.31	5.49	4.07	5.68	-3.00
		H	5.43	4.39	4.81	2.73	0.00	9.82	5.49	7.54	7.25	8.16	5.99	4.51	4.90	3.21	0.00	9.03	5.49	4.48	7.17	5.16
		I	2.39	4.02	10.48	3.56	0.00	4.40	5.07	10.39	8.31	2.72	2.95	4.14	10.57	4.04	0.00	3.61	5.07	7.33	8.22	-0.28
		J	1.01	3.29	5.49	3.91	0.00	2.14	4.22	6.22	8.31	2.16	1.57	3.41	5.58	4.39	0.00	1.35	4.22	4.16	8.22	-0.84
		K	0.37	2.44	1.37	3.32	0.52	1.01	3.17	2.45	6.56	32.90	0.93	2.56	1.46	3.80	0.52	0.22	3.17	-0.61	6.47	29.90
6	1	E	0.000	0.069	0.104	0.015	0.010	0.042	0.042	0.008	0.006	0.000	0.063	0.068	0.088	0.008	-0.079	0.038	0.028	0.005	-0.026	
		F	0.000	0.061	0.120	0.026	0.025	0.038	0.064	0.013	0.013	0.000	0.055	0.104	0.019	0.019	-0.064	0.034	0.050	0.010	-0.019	
		G	0.000	0.045	0.141	0.035	0.057	0.011	0.092	0.017	0.026	0.000	0.039	0.125	0.028	0.028	-0.032	0.007	0.078	0.014	-0.006	
		H	0.000	0.029	0.114	0.042	0.168	0.018	0.079	0.021	0.043	0.000	0.023	0.096	0.035	0.035	0.079	0.014	0.065	0.018	0.011	
		I	0.000	0.018	0.070	0.044	0.175	0.012	0.051	0.023	0.063	0.000	0.012	0.054	0.037	0.037	0.086	0.008	0.037	0.020	0.031	
		J	0.000	0.012	0.043	0.040	0.191	0.008	0.034	0.020	0.093	0.000	0.006	0.027	0.033	0.033	0.102	0.004	0.020	0.017	0.061	
		K	0.000	0.008	0.027	0.031	0.238	0.007	0.024	0.016	0.163	0.000	0.002	0.011	0.024	0.024	0.149	0.003	0.010	0.013	0.131	

(Continued)

(4 of 7 sheets)

Table A12(Continued)

Vertical Pressure, psi, at Indicated Cells																						
Row	Load Point	Location	Total										Rebound									
			P ₁	P ₂	P ₃	P ₄	S	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
7 & 9	1 & 2	E	2.12	2.07	-0.68	0.36	-0.18	6.66	3.27	-0.41	1.92	-0.09	3.13	2.19	0.17	0.72	0.00	6.44	3.48	1.02	2.09	2.44
7	1	F	3.13	2.68	-0.34	0.71	0.00	10.16	4.12	0.50	3.15	-0.09	4.14	2.80	0.51	1.07	0.18	9.94	4.33	1.93	3.32	2.44
7 & 9	1 & 2	G	3.50	3.04	-0.08	1.07	-0.18	13.20	4.65	0.20	4.55	-1.22	4.51	3.16	0.77	1.43	0.00	12.98	4.86	1.63	4.72	1.31
		H	2.12	3.16	0.52	1.78	0.00	9.14	4.86	3.05	5.94	-2.16	3.13	3.28	1.37	2.14	0.18	8.92	5.07	4.48	6.11	0.37
		I	0.92	3.04	0.95	2.14	-0.18	4.40	4.44	6.92	6.99	-2.34	1.93	3.16	1.80	2.50	0.00	4.18	4.65	8.35	7.16	0.19
		J	0.19	2.43	0.43	2.37	0.00	1.92	3.59	3.36	7.26	-2.63	1.20	2.55	1.28	2.73	0.12	1.70	3.80	4.79	7.43	-0.10
		K	-0.18	1.82	-0.77	2.02	0.00	1.01	2.75	-0.21	5.68	3.26	0.83	1.94	0.68	2.38	0.18	0.79	2.96	1.22	5.85	5.81

Vertical Deflection, in., at Indicated Gages																						
Row	Load Point	Location	Total										Rebound									
			D ₁	D ₂	D ₃	D ₄	S	D ₆	D ₇	D ₈	D ₉	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉		
7 & 9	1 & 2	E	0.000	0.072	0.000	0.017	0.003	0.059	0.072	0.011	0.009	0.000	0.069	0.000	0.011	0.027	0.055	0.062	0.007	-0.011		
7	1	F	0.000	0.061	0.000	0.028	0.026	0.050	0.091	0.018	0.022	0.000	0.058	0.000	0.022	0.044	0.046	0.081	0.014	0.002		
7 & 9	1 & 2	G	0.000	0.044	0.000	0.037	0.052	0.036	0.114	0.024	0.044	0.000	0.041	0.000	0.031	0.070	0.032	0.104	0.020	0.024		
		H	0.000	0.027	0.000	0.044	0.093	0.023	0.094	0.029	0.080	0.000	0.024	0.000	0.038	0.111	0.019	0.084	0.025	0.060		
		I	0.000	0.018	0.065	0.047	0.109	0.017	0.064	0.032	0.102	0.000	0.024	0.062	0.041	0.127	0.013	0.054	0.028	0.082		
		J	0.000	0.071	0.034	0.043	0.132	0.011	0.039	0.030	0.138	0.000	0.008	0.031	0.037	0.150	0.007	0.029	0.026	0.118		
		K	0.000	0.006	0.000	0.031	0.140	0.006	0.022	0.032	0.189	0.000	0.003	0.000	0.025	0.158	0.002	0.012	0.018	0.169		

(Continued)

(5 of 7 sheets)

Table A12(Continued)

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells										Rebound									
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
7,9,11	2,1,2	E	1.47	1.59	0.17	0.48	0.18	3.50	2.64	0.00	1.22	0.00	1.47	1.71	0.00	0.48	-0.17	4.17	2.85	1.23	1.75	0.28
7,11	2,2	F	1.66	1.83	0.17	0.72	0.18	5.87	3.17	0.20	2.09	-0.10	1.66	1.95	0.00	0.72	-0.17	6.54	3.38	1.43	2.62	0.15
7,9,11	2,1,2	O	1.66	2.07	0.17	0.83	0.18	8.13	3.69	0.20	3.05	0.00	1.66	2.19	0.00	0.83	-0.17	8.00	3.90	1.43	3.58	0.28
		H	1.20	2.07	0.17	1.07	0.35	5.87	3.80	2.03	4.19	-0.19	1.20	2.19	0.00	1.07	0.00	6.54	4.01	3.26	4.72	0.09
		I	0.74	2.07	0.34	1.43	0.35	2.71	3.59	5.60	5.24	-0.28	0.74	2.19	0.17	1.43	0.00	3.38	3.80	6.83	5.77	0.00
		J	0.46	1.71	0.17	1.43	0.35	1.02	2.96	2.13	5.33	-0.38	0.46	1.83	0.00	1.43	0.00	1.69	3.17	3.36	5.86	-0.10
		K	0.37	1.34	0.17	1.19	0.35	0.44	2.32	0.20	4.37	-0.19	0.37	1.46	0.00	1.19	0.00	1.13	2.53	1.43	4.90	-0.09
7 & 11	2 & 2	N	0.74	0.98	0.17	0.83	0.35	0.00	1.16	-0.61	1.74	-0.19	0.74	1.10	0.00	0.83	0.00	0.67	1.37	0.62	2.27	0.09

Row	Load Point	Location	Vertical Deflection, in., at Indicated Gages										Rebound									
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
7,9,11	2,1,2	E	0.099	0.076	0.110	0.017	0.008	0.070	0.101	0.017	0.009		0.105	0.069	0.088	0.012	-0.064	0.064	0.087	0.011	-0.077	
7,11	2,2	F	0.075	0.066	0.127	0.026	0.021	0.061	0.110	0.025	0.024		0.081	0.059	0.105	0.021	-0.071	0.055	0.096	0.019	-0.062	
7,9,11	2,1,2	G	0.047	0.046	0.157	0.035	0.055	0.043	0.125	0.032	0.060		0.053	0.039	0.135	0.030	-0.037	0.037	0.111	0.026	-0.026	
		H	0.025	0.030	0.132	0.043	0.160	0.028	0.104	0.038	0.176		0.031	0.023	0.110	0.038	0.068	0.022	0.090	0.032	0.090	
		I	0.014	0.019	0.081	0.045	0.167	0.018	0.068	0.040	0.190		0.020	0.012	0.059	0.040	0.075	0.012	0.054	0.034	0.104	
		J	0.007	0.013	0.148	0.039	0.193	0.012	0.041	0.035	0.209		0.013	0.006	0.026	0.034	0.101	0.006	0.027	0.029	0.123	
		K	0.005	0.009	0.033	0.031	0.249	0.009	0.028	0.028	0.261		0.011	0.002	0.011	0.026	0.157	0.003	0.014	0.022	0.175	
7 & 11	2 & 2	N	0.002	0.007	0.022	0.016	0.146	0.006	0.017	0.015	0.157		0.008	0.000	0.000	0.011	0.054	0.000	0.003	0.009	0.071	

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(Continued)

Table A12(Concluded)

Rev	Load Point	Loca- tion	Vertical Pressure, psi, at Indicate Cells										Rebound									
			Total										Rebound									
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
11	1	E	0.10	0.85	1.37	0.36	0.00	1.58	2.00	-0.81	0.96	-0.09	-2.11	0.85	-0.69	0.12	0.00	2.93	2.00	1.63	1.40	0.10
		F	0.19	0.97	1.37	0.36	0.00	2.49	2.53	-0.61	1.48	0.00	-2.02	0.97	-0.69	0.12	0.00	3.84	2.53	1.83	1.92	0.19
		G	1.85	1.21	1.54	0.60	0.00	2.94	2.85	-0.40	2.10	0.00	-0.36	1.21	-0.52	0.36	0.00	4.29	2.85	2.04	2.54	0.19
		H	1.75	1.21	1.54	0.60	0.00	2.03	2.95	0.00	2.71	0.00	-0.46	1.21	-0.52	0.36	0.00	3.38	2.95	2.44	3.15	0.19
		I	1.57	1.21	1.71	0.71	0.00	0.68	2.74	0.41	3.41	0.09	-0.64	1.21	-0.35	0.47	0.00	2.03	2.74	2.85	3.85	0.28
		J	1.48	0.97	1.63	0.71	0.00	-0.22	2.32	-0.40	3.41	-0.09	-0.73	0.97	-0.43	0.47	0.00	1.13	2.32	2.04	3.85	0.10
		K	1.66	0.85	1.54	0.71	0.00	-0.67	1.90	-1.01	2.71	0.00	-0.55	0.85	-0.52	0.47	0.00	0.68	1.90	1.43	3.15	0.19
		N	2.58	0.73	1.54	0.48	0.00	-0.79	1.05	-1.42	1.13	0.00	0.37	0.73	-0.52	0.24	0.00	0.56	1.05	1.02	1.57	0.19

Rev	Load Point	Loca- tion	Vertical Deflection, in., at Indicated Gages										Rebound									
			Total										Rebound									
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀	
11	1	E	0.032	0.062	0.059	0.012	0.006	0.073	0.096	0.017	0.010	0.055	0.060	0.054	0.010	0.025	0.068	0.089	0.012	0.029	0.029	
		F	0.025	0.054	0.093	0.020	0.024	0.062	0.108	0.027	0.328	0.048	0.052	0.088	0.018	0.043	0.057	0.102	0.022	0.047	0.047	
		G	0.013	0.037	0.121	0.028	0.030	0.044	0.119	0.035	0.058	0.036	0.035	0.126	0.026	0.049	0.039	0.112	0.030	0.077	0.077	
		H	0.003	0.024	0.111	0.033	0.045	0.030	0.102	0.040	0.099	0.026	0.022	0.106	0.031	0.064	0.025	0.095	0.035	0.118	0.118	
		I	-0.005	0.015	0.060	0.036	0.066	0.018	0.062	0.041	0.123	0.018	0.013	0.055	0.034	0.085	0.013	0.055	0.036	0.142	0.142	
		J	-0.009	0.009	0.034	0.033	0.098	0.011	0.037	0.036	0.145	0.014	0.007	0.029	0.031	0.117	0.006	0.030	0.031	0.164	0.164	
		K	-0.010	0.007	0.021	0.025	0.142	0.008	0.023	0.028	0.159	0.013	0.005	0.016	0.023	0.161	0.003	0.016	0.016	0.178	0.178	
		N	-0.011	0.004	0.009	0.011	0.048	0.005	0.009	0.013	0.067	0.012	0.002	0.004	0.009	0.067	0.000	0.002	0.008	0.086	0.086	

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Table A-13
Multiple-wheel Heavy Gear Load Flexible Pavement Test, Static Instrumentation Loading Data
Item 4; Load Condition: 30 kips per wheel, 6 wheels, 100 psi

Row	Loca- tion	Vertical Pressure, psi, at Indicated Cells										Rebound									
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
1 & 3	1 & 2	0.00	7.91	10.45	5.74	6.35	1.09	8.48	3.01	4.22	1.71	0.00	7.62	11.54	5.26	5.96	1.09	8.02	3.41	4.05	1.64
	F	0.00	7.63	10.34	6.94	10.07	0.00	8.71	4.01	5.17	3.69	0.00	7.34	11.43	6.46	9.68	0.00	8.25	4.41	5.00	3.59
	G	0.00	5.82	14.27	7.65	11.54	-0.18	6.99	6.41	6.03	5.02	0.00	5.53	15.36	7.17	11.15	-0.18	6.53	6.81	5.86	4.92
	H	0.00	3.92	6.75	7.65	12.51	-36.42	4.82	3.91	6.12	6.66	0.00	3.53	7.84	7.17	12.12	-36.42	4.36	4.31	5.95	6.56
	I	0.00	2.29	1.52	6.70	13.10	0.00	3.21	1.01	5.60	8.71	0.00	2.00	2.61	6.22	12.71	0.00	2.75	1.41	5.43	8.61
1	1	0.00	1.24	-0.22	5.26	8.21	0.00	1.95	0.00	4.48	6.66	0.00	0.95	-0.87	4.78	7.82	0.00	1.49	0.40	4.31	6.56
1 & 3	1 & 2	0.00	0.86	-0.88	3.83	4.10	0.00	1.37	-0.40	3.45	3.28	0.00	0.57	-0.21	3.35	3.71	0.00	0.91	0.00	3.28	3.18
1	1	0.00	0.48	-1.09	1.91	0.97	0.00	0.92	-0.50	1.72	0.72	0.00	0.19	0.00	1.43	0.58	0.00	0.46	-0.10	1.55	0.62

Row	Loca- tion	Vertical Reflection, in., at Indicated Gages										Rebound									
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
1 & 3	1 & 2	0.008	0.044	0.012	0.020	0.003	0.002	0.003	0.000	0.003		0.021	0.096	0.013	0.029	0.015	0.010	0.003	0.000	0.003	
	F	0.015	0.032	-0.004	0.017	0.006	0.000	0.004	0.000	0.004		0.028	0.084	-0.003	0.036	0.018	0.008	0.004	0.000	0.004	
	G	0.029	0.012	0.016	0.026	0.013	-0.003	0.004	0.000	0.005		0.042	0.064	0.017	0.045	0.025	-0.005	0.004	0.000	0.005	
	H	0.047	-0.006	0.014	0.039	0.021	-0.006	0.004	0.000	0.007		0.060	0.046	0.015	0.058	0.033	-0.002	0.004	0.000	0.007	
	I	0.066	-0.018	0.010	0.051	0.031	-0.006	0.003	0.000	0.008		0.079	0.034	0.011	0.070	0.043	-0.002	0.003	0.000	0.008	
1	1	0.098	-0.025	0.006	0.040	0.045	-0.004	0.003	0.000	0.009		0.111	-0.025	0.007	0.059	0.057	-0.004	0.003	0.000	0.009	
1 & 3	1 & 2	0.155	0.029	0.003	0.023	0.052	0.001	0.004	0.000	0.008		0.068	-0.029	0.004	0.042	0.064	0.009	0.004	0.000	0.008	
1	1	0.070	0.031	0.001	0.000	0.025	0.005	0.003	0.000	0.003		0.083	0.021	0.002	0.019	0.037	0.013	0.003	0.000	0.003	

(Continued)

(1 of 7 sheets)

Table A-1j(Continued)

Row	Load Point	Loca- tion	Vertical Pressure, psi, at Indicated Cells										Rebound									
			Total																			
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
1,3,5	2,1,2	E	+26.71	+7.53	14.81	5.38	5.87	28.77	9.63	6.21	5.26	3.59	+27.43	+8.15	11.65	6.10	5.58	33.51	10.09	-16.42	5.51	4.00
		F	-0.20	+7.34	15.68	6.34	9.68	0.36	9.41	8.51	6.38	6.46	+0.52	+7.96	12.52	7.06	9.39	5.10	9.87	-16.12	6.63	6.87
		G	-0.20	+5.53	26.47	7.17	11.35	0.36	7.23	8.01	7.24	8.30	+0.52	+6.15	23.31	7.89	11.06	5.10	7.69	-14.62	7.49	8.71
		H	-0.20	+3.53	12.85	7.06	12.91	0.36	4.82	4.71	7.24	8.92	+0.52	+4.15	9.69	7.78	12.62	5.10	5.28	-17.92	7.49	9.33
		I	-0.20	+1.91	5.01	6.10	14.48	0.36	2.87	1.71	6.46	10.05	+0.52	+2.53	1.85	6.82	14.19	5.10	3.33	-20.92	6.71	12.46
	2 & 2	J	-0.20	+0.96	3.05	4.78	9.60	0.36	1.72	1.91	5.17	6.87	+0.52	+1.58	-0.11	5.50	8.71	5.10	2.18	-20.72	5.42	7.28
	2,1,2	A	-0.60	-0.09	1.96	2.87	4.21	-4.92	0.46	21.53	3.62	3.18	+0.12	+0.53	-1.20	3.59	3.92	-0.18	0.92	-1.10	3.87	3.59
1 & 5	2 & 2	B	-0.60	-0.47	1.74	0.83	0.59	-4.92	-0.11	21.43	1.38	0.11	+0.12	+0.15	-1.42	1.55	0.30	-0.18	+0.35	-1.20	1.63	0.52

Row	Load Point	Loca- tion	Vertical Deflection, in., at Indicated Gages										Rebound									
			Total																			
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₉	D ₉
1,3,5	2,1,2	E	0.011	0.231	0.026	0.034	0.009	0.013	0.006	0.000	-0.002	-0.104	0.168	0.323	0.007	-0.009	0.040	0.005	0.000	0.008		
		F	0.026	0.185	0.031	0.053	0.019	0.008	0.007	0.000	0.001	-0.089	0.122	0.026	0.026	0.001	0.035	0.006	0.000	0.011		
		G	0.056	0.141	0.034	0.075	0.037	0.000	0.008	0.000	0.004	-0.059	0.078	0.031	0.048	0.019	0.027	0.007	0.000	0.014		
		H	0.191	0.111	0.031	0.111	0.058	-0.007	0.009	0.000	0.009	0.076	0.049	0.028	0.084	0.040	+0.020	0.008	0.000	0.019		
		I	0.226	0.090	0.023	0.158	0.084	-0.012	0.009	0.000	0.014	0.111	0.027	0.020	0.131	0.066	+0.150	0.008	0.000	0.024		
	2 & 2	J	0.226	0.080	0.015	0.137	0.111	-0.013	0.007	0.000	0.016	0.111	0.017	0.012	0.110	0.093	+0.014	0.006	0.000	0.026		
	2,1,2	K	0.303	0.075	0.010	0.100	0.131	-0.013	0.007	0.000	0.016	0.188	0.012	0.007	0.073	0.113	+0.014	0.006	0.000	0.026		
1 & 5	2 & 2	B	0.181	0.070	0.006	0.052	0.078	-0.013	0.004	0.000	0.004	0.066	0.007	0.003	0.025	0.060	+0.014	0.003	0.000	0.014		

(Continued)

(2 of 7 sheets)

Table A13 (Continued)

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Gages									
			Total								Rebound	
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
5 & 6	1 & 2	E	1.81	6.67	3.70	4.42	3.43	-0.73	9.86	3.60	5.51	3.59
		F	0.00	6.86	11.44	5.50	5.97	-0.37	9.63	3.00	6.80	7.07
		G	0.00	5.15	22.22	6.22	7.63	-0.37	7.34	3.90	7.58	8.40
		H	0.00	3.24	9.69	5.98	10.08	-5.47	4.12	21.82	7.15	8.40
		I	-0.60	1.14	0.22	4.66	12.91	-5.47	1.95	18.12	6.28	9.22
		J	-0.40	0.19	-1.53	3.35	7.63	-5.47	0.68	17.62	4.91	5.64
5	1	K	-0.40	-0.19	-1.96	2.15	2.94	-5.47	0.00	17.12	3.44	2.05
		N	-0.40	-0.57	-2.18	0.48	-0.09	-5.17	-0.58	16.92	1.29	-0.51

Row	Load Point	Location	Vertical Deflection, in., at Indicated Gages									
			Total								Rebound	
			d ₁	d ₂	d ₃	d ₄	d ₅	d ₆	d ₇	d ₈	d ₉	d ₁₀
5 & 6	1 & 2	E	0.010	0.203	0.044	0.060	0.016	0.060	0.012	0.000	0.001	0.001
		F	0.026	0.150	0.051	0.105	0.032	0.045	0.014	0.000	0.006	0.006
		G	0.049	0.103	0.053	0.131	0.062	0.028	0.015	0.000	0.014	0.014
		H	0.074	0.066	0.048	0.164	0.099	0.013	0.016	0.000	0.024	0.024
		I	0.098	0.038	0.035	0.206	0.135	0.001	0.013	0.000	0.036	0.036
		J	0.116	0.025	0.024	0.172	0.161	-0.004	0.010	0.000	0.048	0.048
5	1	K	0.119	0.016	0.016	0.113	0.176	-0.007	0.008	0.000	0.054	0.054
		N	0.024	0.011	0.009	0.054	0.103	-0.010	0.004	0.000	0.023	0.023

(Continued)

(3 of 7 sheets)

Table A13 (Continued)

Row	Loca- tion	Vertical Pressure, psi, at Indicated Cells									
		Total					Rebound				
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
6	1	0.00	4.67	2.50	3.23	1.76	98.32	9.40	7.61	4.82	3.08
	F	0.00	4.96	6.21	3.95	2.64	0.91	5.63	7.71	6.20	6.56
	G	0.00	4.00	12.53	4.42	0.10	0.73	7.56	10.81	6.89	8.20
	H	0.00	2.48	5.45	4.42	7.14	0.73	4.58	7.11	7.06	9.63
	I	0.00	1.33	1.63	3.95	9.49	0.54	2.75	3.51	6.29	1.17
	J	0.81	0.57	0.22	3.11	6.36	0.36	1.37	2.30	4.99	8.20
	K	0.00	0.29	-0.22	2.15	2.84	0.36	0.68	1.90	3.62	3.90

Row	Loca- tion	Vertical Deflection, in., at Indicated Gages									
		Total					Rebound				
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
6	1	0.017	0.273	0.052	0.075	0.018	0.229	0.022	0.000	0.008	0.008
	F	0.031	0.216	0.061	0.143	0.038	0.183	0.026	0.000	0.017	0.017
	G	0.058	0.164	0.063	0.174	0.075	0.142	0.028	0.000	0.031	0.031
	H	0.219	0.119	0.055	0.201	0.133	0.106	0.028	0.000	0.055	0.055
	I	0.253	0.092	0.042	0.228	0.161	0.087	0.023	0.000	0.076	0.076
	J	0.256	0.072	0.028	0.192	0.186	0.074	0.017	0.000	0.102	0.102
	K	0.348	0.062	0.018	0.127	0.197	0.259	0.014	0.000	0.118	0.118

(Continued)

Table A13 (Continued)

Row	Loc- ation	Vertical Pressure, psi, at Indicated Cells										Vertical Deflection, in., at Indicated Gages									
		Total										Rebound									
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
7 & 9	1 & 2	0.20	3.05	0.65	2.15	0.78	+39.63	8.02	0.80	3.96	1.95	0.20	3.43	2.29	2.39	1.76	+10.42	8.37	2.41	4.22	2.25
		0.00	3.05	1.08	2.75	1.37	-0.37	8.37	3.40	5.17	3.80	0.00	3.43	2.72	2.99	2.35	+0.36	8.72	5.01	5.43	4.10
		0.00	2.48	1.30	3.11	2.15	-0.37	6.65	7.41	5.34	5.23	0.00	2.86	2.94	3.35	3.13	+0.36	7.00	9.02	6.20	5.53
		0.00	1.62	+0.32	3.11	3.13	-0.37	4.12	3.60	6.03	7.69	0.00	2.00	1.96	3.35	4.11	+0.36	4.47	5.21	6.29	7.99
		0.00	0.95	-0.44	2.75	3.52	-0.55	2.29	-0.20	5.34	10.96	0.00	1.33	1.20	2.99	4.50	+0.18	2.64	+1.41	5.60	10.86
7	1	0.00	0.38	-0.99	2.15	2.15	-0.37	1.03	-1.31	4.13	7.48	0.70	0.76	0.65	2.39	3.13	+0.36	1.38	+0.30	4.39	7.78
7 & 9	1 & 2	0.00	0.19	-1.20	1.55	0.78	-0.37	0.45	-1.71	3.01	3.59	0.00	0.57	0.44	1.79	1.76	+0.36	0.80	-0.10	3.27	3.69
Vertical Deflection, in., at Indicated Gages																					
Row	Loc- ation	Total										Rebound									
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
7 & 9	1 & 2	0.002	0.179	0.058	0.075	0.016	0.213	0.032	0.000	0.014	0.012	0.059	0.230	0.052	0.063	-0.002	0.208	0.029	0.000	-0.012	0.007
		0.014	0.125	0.068	0.147	0.041	0.101	0.038	0.000	0.033	0.033	0.071	0.176	0.062	0.135	0.023	0.156	0.035	0.000	0.007	0.007
		0.030	0.071	0.070	0.178	0.080	0.113	0.039	0.000	0.060	0.060	0.087	0.122	0.064	0.166	0.062	0.108	0.036	0.000	0.094	0.075
		0.075	0.023	0.060	0.206	0.136	0.067	0.035	0.000	0.101	0.101	0.112	0.074	0.054	0.194	0.118	0.062	0.032	0.000	0.075	0.103
		0.076	-0.006	0.045	0.230	0.169	0.040	0.029	0.000	0.129	0.129	0.133	0.045	0.039	0.218	0.151	0.035	0.026	0.000	0.103	0.127
7	1	0.106	-0.023	0.029	0.189	0.192	0.086	0.021	0.000	0.153	0.153	0.163	0.028	0.023	0.177	0.174	0.021	0.018	0.000	0.127	0.153
7 & 9	1 & 2	0.177	-0.033	0.019	0.125	0.199	0.018	0.016	0.000	0.164	0.164	0.234	0.018	0.013	0.113	0.113	0.013	0.013	0.000	0.153	0.153
7	1	0.049	-0.038	0.010	0.051	0.115	0.013	0.007	0.000	0.102	0.102	0.106	+0.013	0.004	0.039	0.097	0.008	0.004	0.000	0.376	0.376

(Continued)

(5 of 7 sheets)

Table A13 (Continued)

Row	Load Print tion	Vertical Pressure, psi, at Indicated Cells										Vertical Deflection, in., at Indicated Gages									
		Total					Rebound					Total					Rebound				
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	
7,9,11	2,1,2	E	0.00	1.62	0.54	1.44	0.40	5.96	1.51	3.01	1.03	0.00	1.71	0.33	1.44	0.40	0.36	6.65	3.41	3.44	1.44
		F	0.00	1.62	0.65	1.67	0.59	6.19	3.31	3.79	1.85	0.00	1.71	0.44	1.67	0.59	0.00	6.88	5.21	4.22	2.26
		G	0.00	1.24	0.65	1.91	0.79	4.81	5.01	4.39	2.87	0.00	1.33	0.44	1.91	0.79	0.00	5.50	6.91	4.82	3.28
		H	0.00	0.86	0.43	1.67	0.98	2.98	1.91	4.39	5.13	0.00	0.95	0.22	1.67	0.98	0.18	3.67	2.81	4.82	5.54
		I	0.00	0.57	0.21	1.67	0.88	1.72	0.10	4.05	7.07	0.00	0.66	0.00	1.67	0.88	0.18	2.41	2.00	4.48	7.48
7,11	2 & 2	J	0.00	0.38	0.21	1.32	0.59	0.80	-0.60	3.18	4.92	0.00	0.47	0.00	1.32	0.59	0.18	1.49	2.50	3.61	5.33
7,9,11	2,1,2	K	0.00	0.29	0.21	0.96	0.20	0.34	-0.90	2.15	2.26	0.00	0.38	0.00	0.96	0.20	0.18	1.03	2.80	2.58	2.67
7,11	2 & 2	N	0.00	0.38	0.10	0.72	0.00	0.36	0.00	-1.20	0.94	0.31	0.00	0.47	-0.11	0.72	0.00	0.18	0.69	3.10	1.37
		Total					Rebound					Total					Rebound				
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	
7,9,11	2,1,2	E	0.001	0.327	0.054	0.070	0.015	0.280	0.041	0.000	0.018	0.011	0.228	0.049	0.031	0.018	0.210	0.036	0.000	-0.012	
		F	0.008	0.250	0.065	0.146	0.034	0.216	0.047	0.000	0.042	0.048	0.151	0.060	0.107	0.001	0.146	0.042	0.000	0.012	
		G	0.020	0.183	0.068	0.183	0.075	0.156	0.047	0.000	0.084	0.030	0.084	0.063	0.144	0.042	0.086	0.042	0.000	0.054	
		H	0.038	0.134	0.059	0.227	0.130	0.110	0.042	0.000	0.132	0.048	0.035	0.054	0.188	0.097	0.040	0.037	0.000	0.102	
		I	0.059	0.111	0.045	0.261	0.159	0.085	0.034	0.000	0.156	0.009	0.012	0.040	0.222	0.126	0.015	0.029	0.000	0.126	
7,11	2 & 2	J	0.064	0.095	0.029	0.215	0.189	0.068	0.025	0.000	0.177	0.034	-0.004	0.024	0.176	0.156	-0.002	0.020	0.000	0.117	
7,9,11	2,1,2	K	0.135	0.085	0.018	0.140	0.203	0.058	0.018	0.000	0.180	0.145	-0.014	0.013	0.101	0.170	-0.012	0.013	0.000	0.150	
7,11	2 & 2	N	0.062	0.079	0.008	0.064	0.119	0.051	0.008	0.000	0.109	0.072	-0.020	0.003	0.025	0.086	-0.019	0.003	0.000	0.079	

(Continued)

(6 of 7 sheets)

Row	Load Point	Loca- tion	Vertical Pressure, P.V., at Indicated Cells																			
			Total										Rebound									
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
11	I	E	0.00	1.24	2.29	0.96	0.79	-0.18	3.67	0.10	2.15	0.41	0.00	0.95	0.00	0.84	0.10	-0.18	4.36	2.10	2.41	0.82
		F	0.00	1.15	2.51	1.08	0.98	0.00	3.67	0.50	2.67	1.02	0.00	0.86	0.22	0.96	0.29	0.00	4.36	2.50	2.93	1.43
		G	0.00	0.96	2.51	1.08	0.98	0.00	2.98	0.20	3.02	1.43	0.00	0.67	0.22	0.96	0.29	0.00	3.67	2.20	3.28	1.84
		H	0.00	0.86	2.29	1.08	1.08	0.00	2.06	-0.60	3.02	2.15	0.00	0.57	0.00	0.55	0.39	0.00	2.75	1.40	3.28	2.56
		I	0.00	0.67	2.07	1.08	0.98	0.18	1.03	-1.20	2.67	2.56	0.00	0.38	-0.22	0.96	0.29	0.18	1.72	0.80	2.93	2.97
		J	0.00	0.67	1.75	0.84	0.79	0.00	0.46	-1.40	2.24	1.94	0.00	0.38	-0.54	0.72	0.10	0.00	1.15	0.60	2.50	2.35
		K	0.00	0.77	1.64	0.84	0.69	0.00	0.23	-1.60	1.64	0.92	0.00	0.48	-0.65	0.72	0.00	0.00	0.92	0.40	1.90	1.33

	Vertical Deflection, in., at Indicated Gages																		
	Total									Rebound									
	D ₁	L ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	
I	-0.006	0.206	0.041	0.037	0.006	0.185	0.043	0.000	0.016	+0.014	0.237	0.040	0.023	-0.008	0.220	0.038	0.000	0.000	-0.015
F	-0.001	0.129	0.051	0.072	0.021	0.130	0.043	0.000	0.042	+0.019	0.160	0.050	0.058	0.007	0.165	0.043	0.000	0.000	0.011
G	0.005	0.077	0.055	0.104	0.045	0.074	0.047	0.000	0.068	-0.025	0.102	0.054	0.090	0.031	0.109	0.043	0.000	0.000	0.057
H	0.012	0.035	0.048	0.147	0.074	0.036	0.043	0.000	0.125	0.032	0.066	0.047	0.133	0.060	0.071	0.038	0.000	0.000	0.094
I	0.027	0.010	0.034	0.208	0.107	0.004	0.034	0.000	0.137	0.047	0.041	0.033	0.194	0.093	0.039	0.029	0.000	0.000	0.106
J	0.040	-0.005	0.020	0.168	0.142	-0.024	0.024	0.000	0.179	0.060	+0.026	0.019	0.154	0.128	+0.041	0.019	0.000	0.000	0.148
K	0.049	-0.010	0.014	0.111	0.164	-0.022	0.017	0.000	0.193	0.069	+0.021	0.013	0.097	0.150	+0.013	0.012	0.000	0.000	0.152

Table A-14
Multiple-wheel Heavy Gear Load Flexible Pavement Test, Static Instrumentation Loading Data
Item 3: Load Condition: 30 kips per wheel, 12 wheels, 100 psi

Vertical Pressure, psi, at Indicated Cells																								
Row	Load Point	Location	Total										Rebound											
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀		
1	1	A	2.95	1.58	0.17	0.47	0.00	1.81	1.27	-0.20	0.52	-0.10	1.84	1.95	0.51	2.02	0.00	1.01	1.48	1.12	0.35	1.12	1.12	
		B	5.90	2.31	0.43	0.95	0.00	3.73	1.59	-0.10	0.96	-0.10	4.79	2.68	0.77	2.50	0.00	3.73	1.90	1.22	0.79	1.12	1.12	
		C	9.12	3.25	1.20	1.54	0.00	6.44	2.53	0.21	1.74	0.00	8.01	3.66	1.54	3.09	0.00	6.44	2.74	1.53	1.57	1.22	1.22	
		D	9.95	3.77	2.06	2.01	0.17	7.34	2.96	0.42	2.27	-0.10	8.84	4.14	2.40	3.56	0.17	7.34	3.17	1.73	2.10	1.12	1.12	
1 4 3	1 4 2	E	10.32	4.26	3.95	2.49	0.00	8.02	3.17	0.72	2.79	-0.10	9.21	4.63	4.29	4.04	0.00	8.02	3.38	2.04	2.62	1.12	1.12	
1	1	F	10.88	5.11	8.76	3.56	0.00	9.71	3.80	2.04	3.93	-0.10	9.77	5.48	9.10	5.11	0.00	9.71	4.01	3.36	3.76	1.12	1.12	
1 4 3	1 4 2	G	11.52	5.72	8.59	4.63	-0.18	11.06	4.12	1.53	5.07	-0.10	10.41	6.09	8.93	6.18	-0.18	11.06	4.33	2.85	4.90	1.12	1.12	
		H	7.74	5.34	8.42	5.22	-0.35	8.24	25.34	3.06	6.11	-0.28	6.63	6.21	8.76	6.77	-0.35	8.24	25.55	4.38	5.94	0.94	0.94	
		I	4.52	5.48	10.48	5.22	-0.35	4.40	25.23	5.60	6.73	-0.66	3.41	5.85	10.82	6.77	-0.35	4.40	25.44	6.92	6.56	0.56	0.56	
		J	2.95	4.87	5.93	4.98	-0.35	2.26	3.69	2.55	6.11	-0.94	1.84	5.24	6.27	6.53	-0.35	2.26	3.90	3.87	6.64	0.28	0.28	
		K	3.32	4.50	1.89	4.03	-0.35	2.03	3.38	-0.30	5.94	-0.47	2.21	4.87	2.23	5.58	-0.35	2.03	3.59	1.02	5.77	0.75	0.75	
1	1	L	4.42	4.26	1.03	3.56	-0.35	2.49	3.38	-1.02	5.24	-1.50	3.31	4.63	1.37	5.11	-0.35	2.49	3.59	0.30	5.07	-0.33	-0.33	
		M	6.18	4.26	0.51	2.85	-0.35	3.51	3.38	-1.02	4.63	-1.41	5.07	4.73	0.85	4.50	-0.35	3.51	3.59	0.30	4.46	-0.19	-0.19	
		N	9.59	4.50	0.51	2.13	0.00	5.21	3.48	-0.91	3.84	-1.22	8.48	4.87	0.85	3.68	0.00	5.21	3.69	0.41	3.67	0.00	0.00	

Vertical Deflection, in., at Indicated Gages																								
Row	Load Point	Location	Total										Rebound											
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀		
1	1	A	0.094	0.015	0.004	0.000	0.000	0.002	0.000	-0.001	0.000		0.027	0.008	0.002	-0.002	0.004	0.002	0.000	0.000	0.000	0.000	0.000	
		B	0.075	0.021	0.008	0.001	0.000	0.003	0.000	-0.001	-0.002		0.046	0.014	0.006	-0.001	0.004	0.003	0.000	0.000	-0.002	-0.002	-0.002	
		C	0.103	0.128	0.015	0.003	0.001	0.004	0.001	0.000	-0.002		0.076	0.021	0.013	0.001	0.005	0.004	0.001	0.001	-0.002	-0.002	-0.002	
		D	0.125	0.030	0.018	0.004	0.002	0.004	0.002	0.000	-0.002		0.098	0.023	0.016	0.002	0.006	0.004	0.002	0.001	-0.002	-0.002	-0.002	
1 4 3	1 4 2	E	0.144	0.030	0.022	0.005	0.004	0.004	0.002	0.000	-0.002		0.117	0.023	0.020	0.003	0.008	0.004	0.002	0.001	-0.002	-0.002	-0.002	
1	1	F	0.115	0.028	0.030	0.007	0.008	0.003	0.003	0.001	-0.002		0.089	0.021	0.028	0.005	0.012	0.003	0.003	0.003	-0.002	-0.002	-0.002	
1 4 3	1 4 2	G	0.065	0.023	0.036	0.010	0.014	0.002	0.002	0.001	0.000		0.058	0.016	0.034	0.008	0.018	0.003	0.003	0.003	0.002	0.000	0.000	
		H	0.062	0.019	0.030	0.013	0.023	0.002	0.002	0.001	0.001		0.035	0.012	0.028	0.011	0.027	0.002	0.002	0.002	0.001	0.001	0.001	
		I	0.057	0.018	0.022	0.014	0.033	0.003	0.002	0.002	0.003		0.030	0.011	0.020	0.012	0.037	0.003	0.002	0.003	0.003	0.003	0.003	
		J	0.074	0.020	0.016	0.013	0.042	0.004	0.001	0.001	0.004		0.037	0.013	0.011	0.011	0.045	0.004	0.001	0.002	0.002	0.004	0.004	
		K	0.082	0.024	0.015	0.011	0.045	0.004	0.001	0.001	0.005		0.055	0.017	0.013	0.009	0.049	0.007	0.001	0.002	0.002	0.005	0.005	
1	1	L	0.092	0.026	0.015	0.011	0.043	0.008	0.002	0.001	0.005		0.065	0.019	0.013	0.009	0.047	0.008	0.002	0.002	0.002	0.005	0.005	
		M	0.101	0.029	0.016	0.010	0.038	0.009	0.003	0.001	0.004		0.074	0.022	0.014	-0.006	0.042	0.009	0.003	0.002	0.002	0.004	0.004	
		N	0.116	0.033	0.020	0.009	0.030	0.010	0.004	0.001	0.003		0.089	0.025	0.018	-0.007	0.034	0.010	0.006	0.002	0.002	0.003	0.003	

(Continued)

(1 of 11 sheets)

Table A14 (Continued)

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells									
			Total					Rebound				
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
2 & 4	1 & 2	E	10.32	4.87	4.03	2.02	0.00	9.70	3.80	1.33	2.80	0.00
		G	11.61	6.58	10.65	4.75	4.80	12.19	5.07	4.79	5.68	0.09
		H	7.56	6.58	10.05	5.82	10.57	8.69	5.07	5.60	6.82	8.90
		I	3.78	6.33	14.60	6.30	0.00	4.06	4.85	8.15	7.52	0.66
		J	2.39	5.60	8.24	6.42	0.00	2.25	4.43	4.68	7.43	0.75
		K	2.95	4.87	2.40	5.23	3.81	2.14	25.12	1.22	6.12	12.00

Row	Load Point	Location	Vertical Reflection, in., at Indicated Gages									
			Total					Rebound				
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
2 & 4	1 & 2	E	0.157	0.037	0.030	0.007	0.006	0.006	0.005	0.001	-0.004	
		G	0.084	0.027	0.059	0.014	0.020	0.004	0.007	0.002	-0.001	
		H	0.061	0.022	0.050	0.017	0.032	0.004	0.006	0.002	+0.001	
		I	0.055	0.021	0.034	0.018	0.045	0.014	0.004	0.002	+0.004	
		J	0.063	0.023	0.027	0.017	0.060	0.005	0.003	0.002	+0.006	
		K	0.101	0.028	0.024	0.015	0.049	0.008	0.003	0.001	-0.005	

(Continued)

(2 of 11 sheets)

Table A14 (Continued)

Row	Loca- tion	Vertical Pressure, psi, at Indicated Cells									
		Total					Rebound				
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
1.3.5	2 & 2	A	2.58	1.70	0.09	0.12	0.00	2.48	1.40	0.00	0.61
		B	5.53	2.55	0.17	0.48	0.00	5.42	2.11	-0.20	0.96
		C	9.21	3.65	0.78	0.95	0.00	9.26	2.95	0.10	1.74
		D	9.95	4.26	1.55	1.19	0.00	10.39	3.38	0.31	2.27
2.1.2		E	10.32	4.87	3.95	1.67	0.00	10.84	4.01	1.73	2.97
2 & 2		F	11.89	5.84	12.03	2.97	0.00	11.97	4.21	5.70	4.28
2.1.2		G	12.53	6.45	10.83	4.28	0.00	12.64	5.28	4.69	5.94
		H	8.29	6.82	11.00	5.47	40.10	8.81	5.28	4.85	6.99
		I	4.05	6.33	16.67	6.30	-12.82	4.06	5.07	7.13	7.60
		J	2.76	5.60	8.94	6.42	-12.13	2.26	4.54	3.67	7.13
		K	2.95	4.99	2.58	5.23	41.77	2.26	4.22	0.41	6.20
2 & 2		L	4.05	4.88	1.55	4.52	-19.11	3.39	4.01	-0.20	5.44
		M	5.71	4.87	1.03	3.92	-20.79	5.19	4.01	-0.51	4.54
		N	9.21	5.11	1.03	3.09	-20.45	9.14	4.22	-0.41	3.58

Table A15 (Continued)

Row	Loca- tion	Vertical Reflection, in., at Indicated Gages									
		Total					Rebound				
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
1.3.5	2 & 2	A	0.165	0.025	0.009	0.001	0.000	0.006	0.001	0.000	-0.002
		B	0.166	0.036	0.017	0.003	0.003	0.008	0.002	0.001	-0.002
		C	0.172	0.046	0.028	0.005	0.003	0.010	0.004	0.001	-0.002
		D	0.217	0.051	0.034	0.007	0.004	0.010	0.006	0.002	-0.002
2.1.2		E	0.261	0.053	0.042	0.009	0.007	0.010	0.008	0.002	-0.002
2 & 2		F	0.192	0.048	0.051	0.013	0.015	0.009	0.010	0.003	0.000
2.1.2		G	0.147	0.038	0.086	0.018	0.027	0.007	0.011	0.005	0.003
		H	0.120	0.031	0.073	0.022	0.042	0.006	0.009	0.006	0.006
		I	0.114	0.030	0.049	0.024	0.060	0.006	0.006	0.010	0.010
		J	0.127	0.032	0.038	0.023	0.066	0.007	0.004	0.005	0.011
		K	0.214	0.039	0.034	0.019	0.131	0.009	0.004	0.005	0.015
2 & 2		L	0.253	0.042	0.035	0.018	0.114	0.011	0.004	0.004	0.014
		M	0.222	0.047	0.037	0.017	0.097	0.012	0.005	0.004	0.013
		N	0.213	0.052	0.045	0.016	0.074	0.013	0.007	0.004	0.009

(Continued)

(3 of 11 sheets)

Table A14 (Continued)

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells										Vertical Deflection, in., at Indicated Gages																			
			Total					Rebound					Total					Rebound														
			P ₁	P ₂	P ₃	P ₄	F ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	F ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	
2 & 4	2 & 1	E	8.84	4.14	2.14	1.55	0.00	10.72	4.01	1.33	2.97	0.09	8.29	4.14	2.75	1.67	0.18	10.83	4.01	2.86	3.14	2.53										
		G	12.25	5.84	6.14	3.92	0.00	11.85	5.49	3.87	6.03	-1.50	11.70	5.84	7.05	4.04	0.12	11.96	5.49	5.40	6.20	0.54										
		H	8.11	5.97	8.76	4.99	1.04	8.24	5.49	3.87	7.17	-2.07	7.56	5.97	9.37	5.11	1.22	8.35	5.49	5.40	7.34	0.37										
		I	1.05	5.64	14.51	5.94	-0.35	4.06	5.29	5.40	7.87	-2.35	3.50	5.84	15.12	6.08	-0.17	4.17	5.28	6.93	8.04	0.09										
		J	1.49	5.11	8.33	5.18	-0.35	2.14	4.85	2.65	7.69	-2.44	1.84	5.11	8.94	5.30	-0.17	2.25	4.85	4.18	7.86	0.00										
		K	2.58	4.63	1.53	5.23	1.73	2.14	4.22	-0.01	6.29	-3.00	2.03	4.63	2.24	5.35	1.91	2.25	4.22	0.72	6.46	-0.56										

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells										Vertical Deflection, in., at Indicated Gages									
			Total					Rebound					Total					Rebound				
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	
2 & 4	2 & 1	E	0.121	0.057	0.052	0.11	0.008	0.016	0.012	0.003	0.001		0.138	0.043	0.028	0.004	-0.034	0.015	0.011	0.002	0.007	
		G	0.055	0.041	0.104	0.024	0.035	0.011	0.022	0.007	0.007		0.072	0.027	0.080	0.017	-0.007	0.010	0.021	0.006	0.013	
		H	0.032	0.034	0.090	0.028	0.057	0.009	0.019	0.001	0.013		0.049	0.020	0.066	0.021	0.015	0.008	0.018	0.007	0.019	
		I	0.028	0.032	0.061	0.031	0.078	0.009	0.014	0.009	0.020		0.045	0.018	0.037	0.024	0.036	0.008	0.013	0.008	0.026	
		J	0.040	0.036	0.046	0.029	0.108	0.010	0.010	0.008	0.025		0.057	0.022	0.022	0.022	0.066	0.009	0.009	0.007	0.031	
		K	0.088	0.045	0.042	0.025	0.135	0.013	0.009	0.007	0.026		0.105	0.031	0.020	0.018	0.143	0.012	0.008	0.006	0.034	

(Continued)

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Table A14 (Continued)

Vertical Pressure, psi, at Indicated Cells																							
Row	Load Point	Location	Total										Rebound										
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	
5	1	A	1.85	1.46	-0.18	0.12	-0.17	2.82	1.48	-0.20	0.52	0.09	1.75	1.46	0.00	0.00	0.00	0.00	2.48	1.69	0.82	0.70	0.65
		B	3.51	2.19	0.00	0.36	0.00	5.64	2.10	-0.20	0.96	0.00	3.41	2.19	0.18	0.24	0.17	5.30	2.31	0.82	1.14	0.56	
		C	5.17	1.92	0.25	0.72	0.00	9.37	2.95	-0.20	1.74	-0.09	5.07	2.92	0.43	0.60	0.17	9.02	3.16	0.82	1.92	0.47	
5 & 6	1 & 2	D	6.27	3.65	1.03	1.07	0.00	10.83	3.59	0.41	2.44	0.00	6.17	3.65	1.21	0.95	0.17	10.49	3.80	1.43	2.62	0.56	
		E	7.28	4.14	1.20	1.55	0.00	11.17	4.11	1.63	3.28	0.00	7.18	4.14	1.38	1.43	0.17	10.83	4.32	2.65	3.36	0.56	
		F	9.68	4.87	2.66	2.26	0.00	12.08	4.85	4.18	4.28	0.00	9.58	4.87	2.84	2.14	0.17	11.74	5.06	5.20	4.46	0.56	
5 & 6	1 & 2	G	11.62	5.48	3.26	3.33	-0.17	12.75	5.38	3.97	5.94	-0.38	11.52	5.48	3.44	3.21	0.00	12.41	5.59	4.99	6.12	0.18	
		H	7.56	5.84	7.90	4.40	-0.17	8.69	5.49	4.48	7.16	-0.47	7.46	5.84	8.08	4.28	0.00	8.35	5.70	5.50	7.34	0.09	
		I	5.69	5.60	15.98	5.47	-0.35	4.40	5.28	5.81	7.95	-0.56	3.59	5.60	16.16	5.35	-0.18	4.06	5.49	6.83	8.13	0.00	
5	1	J	2.03	4.99	8.93	5.94	0.00	2.48	4.64	2.85	7.86	-0.75	1.93	4.99	9.11	5.82	0.17	2.14	4.85	3.87	8.04	-0.19	
		K	2.12	4.38	-0.00	5.11	20.62	2.48	4.22	-0.51	6.29	-0.94	2.02	4.38	0.02	4.99	20.79	2.14	4.43	0.51	6.47	-0.38	
		L	2.58	4.26	1.03	4.52	-24.09	3.72	4.01	-1.02	5.59	-0.75	2.48	4.26	1.21	4.40	-23.92	3.38	4.22	0.00	5.77	-0.19	
		M	3.69	4.14	0.51	3.69	-0.17	5.75	4.01	-1.22	4.63	-0.66	3.59	4.14	0.69	3.57	0.00	5.41	4.22	-0.20	4.81	-0.10	
		N	5.53	4.35	0.34	2.97	0.00	9.48	4.22	-1.22	3.67	-0.47	5.43	4.38	0.52	2.85	0.17	9.14	4.43	-0.20	3.85	0.09	

Row	Load Point	Location	Vertical Reflection, in., at Indicated Cells										Rebound									
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
5	1	A	0.090	0.042	0.026	0.002	0.000	0.013	0.004	0.001	0.000	0.000	0.099	0.022	0.004	-0.005	-0.004	0.009	-0.002	-0.001	0.001	0.008
		B	0.113	0.057	0.032	0.004	0.001	0.019	0.008	0.001	0.000	0.000	0.122	0.037	0.010	-0.003	-0.002	0.015	0.002	-0.001	0.001	0.008
		C	0.127	0.069	0.047	0.007	0.003	0.023	0.012	0.003	0.000	0.000	0.136	0.049	0.025	0.000	-0.001	0.019	0.006	0.001	0.001	0.008
5 & 6	1 & 2	D	0.139	0.075	0.059	0.011	0.007	0.026	0.017	0.004	0.000	0.000	0.148	0.055	0.037	0.004	0.003	0.022	0.011	0.002	0.001	0.010
		E	0.144	0.077	0.063	0.015	0.011	0.027	0.021	0.005	0.003	0.003	0.153	0.057	0.061	0.008	0.007	0.023	0.015	0.003	0.003	0.011
		F	0.119	0.070	0.098	0.021	0.022	0.024	0.029	0.007	0.007	0.007	0.128	0.050	0.076	0.014	0.018	0.020	0.023	0.005	0.005	0.015
5 & 6	1 & 2	G	0.075	0.055	0.123	0.029	0.045	0.019	0.039	0.010	0.013	0.013	0.085	0.035	0.101	0.022	0.041	0.015	0.033	0.008	0.008	0.021
		H	0.050	0.045	0.106	0.035	0.078	0.015	0.035	0.012	0.022	0.022	0.059	0.025	0.084	0.028	0.074	0.011	0.029	0.010	0.030	0.030
		I	0.044	0.043	0.069	0.038	0.101	0.014	0.024	0.013	0.032	0.032	0.053	0.023	0.047	0.031	0.097	0.010	0.018	0.011	0.040	0.040
5	1	J	0.058	0.048	0.052	0.035	0.128	0.015	0.010	0.013	0.042	0.042	0.067	0.028	0.030	0.028	0.124	0.011	0.012	0.011	0.050	0.050
		K	0.103	0.061	0.047	0.030	0.161	0.019	0.016	0.011	0.047	0.047	0.112	0.041	0.025	0.023	0.157	0.015	0.010	0.009	0.055	0.055
		L	0.121	0.068	0.049	0.028	0.143	0.022	0.016	0.010	0.044	0.044	0.130	0.048	0.027	0.021	0.139	0.018	0.010	0.008	0.052	0.052
5	1	M	0.130	0.074	0.058	0.026	0.115	0.024	0.018	0.009	0.039	0.039	0.139	0.054	0.036	0.019	0.111	0.020	0.012	0.007	0.047	0.047
		N	0.138	0.082	0.060	0.025	0.083	0.028	0.021	0.009	0.030	0.030	0.147	0.062	0.068	0.018	0.079	0.024	0.015	0.007	0.038	0.038

(Continued)

(5 of 11 sheets)

Table A14 (Continued)

Row	Load Location	Vertical Pressure, psi, at Indicated Cells									
		Total					Rebound				
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
6	1	4.42	3.17	0.35	0.84	0.00	10.61	3.91	1.83	2.62	0.00
	2	7.92	4.39	1.38	2.50	-0.52	13.09	5.28	6.31	5.42	-0.28
	3	5.53	4.63	4.64	3.09	0.00	10.04	5.49	7.33	6.91	23.62
	4	2.76	4.51	9.97	3.92	0.00	4.74	5.17	10.18	7.87	2.62
	5	1.65	4.02	4.81	4.40	0.00	2.59	4.65	5.70	7.87	3.65
	6	1.47	3.66	1.72	3.92	1.21	2.37	4.22	2.54	6.82	33.37

Row	Load Location	Vertical Deflection, in., at Indicated Gages									
		Total					Rebound				
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
6	1	0.266	0.079	0.101	0.018	0.110	0.045	0.098	0.008	0.005	0.005
	2	0.149	0.052	0.130	0.037	0.065	0.030	0.084	0.018	0.026	0.026
	3	0.121	0.043	0.108	0.044	0.171	0.025	0.075	0.022	0.033	0.033
	4	0.115	0.043	0.072	0.047	0.175	0.024	0.051	0.024	0.061	0.061
	5	0.127	0.052	0.052	0.043	0.194	0.027	0.059	0.023	0.069	0.069
	6	0.177	0.066	0.047	0.057	0.247	0.032	0.035	0.020	0.147	0.147

(Continued)

(6 of 11 sheets)

Table A11-(Continued)

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells										Rebound									
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	F ₁	F ₂	F ₃	F ₄	F ₅	F ₆	F ₇	F ₈	F ₉	F ₁₀
7	1	B	0.83	1.22	-0.60	0.12	0.00	3.05	1.79	-0.20	0.70	-0.19	1.66	1.34	0.17	0.35	0.00	2.94	2.01	1.22	0.79	2.62
		C	1.48	1.58	-0.51	0.36	0.00	4.97	2.53	-0.20	1.22	0.00	2.31	1.70	-0.35	0.59	0.00	4.86	2.75	1.22	1.31	2.81
		D	1.85	1.95	-0.51	0.36	0.00	5.98	2.95	-0.36	1.57	-0.19	2.68	2.07	0.35	0.59	0.00	5.87	3.17	1.12	1.66	2.62
7 & 9	1 & 2	E	2.40	2.31	-0.51	0.18	0.00	7.00	3.37	-0.20	2.01	-0.19	3.23	2.43	0.35	0.71	0.00	6.89	3.59	1.22	2.10	2.62
7	1	F	3.32	2.80	-0.26	0.84	0.00	9.93	4.01	0.51	3.15	-0.09	4.15	2.92	0.60	1.07	0.00	9.82	4.23	1.93	3.24	2.72
7 & 9	1 & 2	G	3.50	3.05	0.09	1.31	0.17	12.75	4.64	0.61	4.63	-1.03	4.33	3.17	0.95	1.54	0.17	12.64	4.86	2.03	4.72	1.78
		H	2.40	3.29	0.52	1.90	0.17	9.37	4.75	2.85	5.77	-2.15	3.23	3.41	1.38	2.13	0.17	9.26	4.97	4.27	5.86	0.66
		I	1.20	3.17	1.03	2.36	0.00	4.63	4.64	7.13	6.73	-2.25	2.03	3.29	1.89	2.49	0.00	4.52	4.86	8.55	6.82	0.56
		J	0.65	2.92	0.31	2.50	0.00	2.37	4.11	3.26	7.08	-1.87	1.48	3.04	1.20	2.73	0.00	2.26	4.33	4.68	7.17	0.94
		K	0.56	2.68	-0.17	2.26	0.00	2.03	3.80	0.00	5.86	9.19	1.39	2.80	0.65	2.49	0.00	1.92	4.02	1.42	5.95	12.00
7	1	L	0.74	2.56	-0.34	2.02	0.00	2.37	3.58	-0.51	5.16	-0.37	1.57	2.68	0.52	2.25	0.00	2.26	3.80	0.91	5.25	2.44
		M	0.92	2.56	-0.51	1.90	0.00	3.16	3.58	-1.22	4.28	-2.06	1.75	2.68	0.35	2.13	0.00	3.05	3.80	0.40	4.37	0.75
		N	1.48	2.68	-0.51	1.55	0.00	5.08	4.97	-1.02	3.41	-2.25	2.31	2.80	0.35	1.78	0.00	4.97	3.80	0.40	3.50	0.55

Table A12-(Continued)

Row	Load Point	Location	Vertical Deflection, in., at Indicated Cells										Rebound									
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀	F ₁	F ₂	F ₃	F ₄	F ₅	F ₆	F ₇	F ₈	F ₉	F ₁₀
7	1	B	0.055	0.070	0.046	0.005	0.001	0.051	0.031	0.004	0.001		0.108	0.050	0.030	-0.062	0.022	0.033	0.009	-0.004	-0.012	
		C	0.089	0.082	0.083	0.010	0.004	0.042	0.058	0.007	0.003		0.131	0.062	0.067	0.003	0.025	0.044	0.036	-0.001	-0.010	
		D	0.103	0.086	0.099	0.014	0.007	0.067	0.070	0.010	0.005		0.152	0.066	0.083	0.007	0.028	0.049	0.048	0.002	-0.006	
7 & 9	1 & 2	E	0.126	0.085	0.107	0.018	0.012	0.069	0.076	0.013	0.010		0.175	0.065	0.091	0.011	0.033	0.051	0.054	0.005	-0.003	
7	1	F	0.088	0.077	0.117	0.008	0.027	0.061	0.090	0.019	0.020		0.137	0.057	0.101	0.021	0.048	0.043	0.066	0.011	0.007	
7 & 9	1 & 2	G	0.043	0.060	0.131	0.038	0.057	0.048	0.113	0.027	0.043		0.092	0.040	0.115	0.031	0.078	0.030	0.091	0.019	0.030	
		H	0.019	0.070	0.109	0.044	0.096	0.040	0.098	0.032	0.072		0.048	0.030	0.093	0.037	0.117	0.022	0.076	0.024	0.059	
		I	0.009	0.048	0.072	0.047	0.117	0.038	0.067	0.034	0.094		0.058	0.028	0.056	0.036	0.161	0.026	0.085	0.026	0.081	
		J	0.015	0.057	0.051	0.043	0.140	0.044	0.050	0.032	0.124		0.064	0.037	0.035	0.036	0.170	0.037	0.023	0.020	0.111	
		K	0.033	0.072	0.048	0.037	0.149	0.055	0.045	0.028	0.164		0.082	0.052	0.032	0.030	0.156	0.042	0.025	0.018	0.140	
7	1	L	0.043	0.060	0.052	0.034	0.135	0.060	0.047	0.026	0.153		0.092	0.060	0.036	0.027	0.134	0.047	0.030	0.017	0.116	
		M	0.051	0.085	0.063	0.032	0.113	0.065	0.052	0.025	0.129		0.100	0.065	0.047	0.025	0.134	0.047	0.030	0.017	0.116	
		N	0.067	0.092	0.095	0.031	0.075	0.072	0.075	0.024	0.092		0.116	0.072	0.060	0.024	0.096	0.044	0.033	0.016	0.079	

(Continued)

(7 of 11 sheets)

Table A11 (Continued)

Row	Loca- tion	Vertical Pressure, Psi, at Indicated Cells									
		Total					Rebound				
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
8 & 10	1 & 2	1.75	1.83	-0.43	0.18	0.00	5.65	2.95	0.21	2.10	0.00
	G	2.39	2.44	-0.09	1.07	0.00	11.29	1.01	0.61	4.20	-0.19
	H	1.66	2.68	0.26	1.43	0.00	7.68	1.22	4.38	5.42	-0.19
	I	0.92	2.56	0.43	1.67	0.00	3.84	4.01	8.86	6.29	-0.28
	J	0.64	2.44	0.26	1.90	0.00	2.26	3.69	4.18	1.47	1.50
	K	0.64	2.19	-0.09	1.67	0.00	1.92	3.37	1.43	5.42	30.56

Row	Loca- tion	Vertical Reflection, in., at Indicated Gages									
		Total					Rebound				
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
8 & 10	1 & 2	0.216	0.074	0.097	0.020	0.013	0.064	0.081	0.015	0.011	0.000
	G	0.115	0.050	0.132	0.039	0.065	0.043	0.115	0.029	0.049	0.000
	H	0.090	0.040	0.105	0.046	0.146	0.035	0.093	0.035	0.120	0.000
	I	0.084	0.040	0.069	0.048	0.158	0.035	0.061	0.038	0.134	0.000
	J	0.088	0.050	0.049	0.045	0.183	0.043	0.045	0.035	0.159	0.000
	K	0.100	0.065	0.047	0.039	0.210	0.056	0.042	0.031	0.209	0.000

(Continued)

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Table A14 (Continued)

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells										Rebound										
			P ₁	P ₂	P ₃	P ₄	P ₅	Total	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
7 & 11	2 & 2	B	0.92	0.97	0.00	0.23	0.17	1.58	1.47	-0.20	0.52	-0.19	0.74	0.97	0.00	0.23	0.00	1.80	1.58	0.82	0.82	0.67	1.31
		C	1.29	1.22	0.00	0.35	0.17	2.49	2.11	-0.20	0.87	-0.10	1.11	1.22	0.00	0.35	0.00	2.71	2.22	0.82	0.82	1.22	1.40
		D	1.47	1.46	0.00	0.47	0.17	3.28	2.42	-0.20	1.22	-0.19	1.29	1.46	0.00	0.47	0.00	3.50	2.53	0.82	0.82	1.57	1.31
7.9, 11	2.1, 2	E	1.66	1.58	0.00	0.47	0.17	3.95	2.74	-0.20	1.39	-0.19	1.48	1.58	0.00	0.47	0.00	4.17	2.85	0.82	0.82	1.74	1.31
7.11	2.2	F	2.03	1.95	0.00	0.71	0.17	6.55	3.37	0.21	2.26	-0.10	1.85	1.95	0.00	0.71	0.00	6.77	3.48	1.23	2.61	1.40	1.40
7.9, 11	2.1, 2	G	2.03	2.19	0.17	0.95	0.17	8.69	3.80	0.41	3.40	-0.10	1.85	2.19	0.17	0.95	0.00	8.91	3.91	1.43	3.75	1.40	1.40
		H	1.66	2.11	0.34	1.18	0.17	6.55	3.90	1.84	4.37	-0.10	1.48	2.31	0.34	1.18	0.00	6.77	4.01	2.86	4.72	1.40	1.40
		I	1.20	1.19	0.34	1.42	0.17	3.39	3.80	5.30	5.24	-0.19	1.02	2.19	0.34	1.42	0.00	3.61	3.91	6.32	5.59	1.31	1.31
		J	0.92	1.19	0.34	1.66	0.17	1.79	3.58	2.24	5.42	-0.75	0.74	2.19	0.34	1.66	0.00	1.92	3.69	3.26	5.77	0.75	0.75
		K	1.01	1.95	0.17	1.42	0.35	1.47	3.16	-0.20	4.54	-1.50	0.83	1.95	0.17	1.42	0.18	1.69	3.27	0.82	4.89	0.30	0.30
7 & 11	2 & 2	L	1.11	1.95	0.17	1.42	0.17	1.98	3.06	-0.30	4.02	-1.69	0.93	1.95	0.17	1.42	0.00	1.80	3.17	0.72	4.37	-0.19	-0.19
		M	1.38	2.07	0.17	1.18	0.17	1.92	3.06	-0.61	3.32	-1.32	1.20	2.07	0.17	1.18	0.00	2.14	3.17	0.41	3.67	+0.18	+0.18
		N	1.34	2.19	0.09	1.18	0.17	2.94	3.16	-0.81	2.62	-1.32	1.66	2.19	0.09	1.18	0.00	3.16	3.27	0.21	2.97	0.18	0.18

Vertical Reflection, in., at Indicated Gages																							
Total											Rebound												
b ₁	b ₂	b ₃	b ₄	b ₅	b ₆	b ₇	b ₈	b ₉	b ₁	b ₂	b ₃	b ₄	b ₅	b ₆	b ₇	b ₈	b ₉	b ₁	b ₂	b ₃	b ₄	b ₅	
B	0.045	0.064	0.041	0.005	0.001	0.044	0.045	0.005	0.001	0.053	0.043	0.010	-0.001	-0.077	0.043	0.017	-0.003	-0.054					
C	0.064	0.077	0.060	0.009	0.003	0.074	0.082	0.009	0.003	0.072	0.056	0.049	0.003	-0.075	0.053	0.054	0.001	-0.052					
D	0.088	0.083	0.101	0.043	0.006	0.078	0.099	0.013	0.006	0.096	0.062	0.070	0.007	-0.072	0.057	0.071	0.005	-0.049					
E	0.103	0.084	0.106	0.016	0.009	0.079	0.103	0.016	0.009	0.111	0.063	0.075	0.010	-0.069	0.058	0.175	0.008	-0.046					
F	0.074	0.073	0.121	0.027	0.004	0.068	0.112	0.024	0.024	0.082	0.052	0.090	0.020	-0.094	0.047	0.084	0.016	-0.031					
G	0.040	0.056	0.114	0.035	0.006	0.053	0.128	0.033	0.056	0.048	0.035	0.118	0.009	-0.020	0.032	0.100	0.005	0.001					
H	0.029	0.046	0.126	0.041	0.160	0.044	0.109	0.038	0.143	0.030	0.025	0.097	0.035	0.082	0.023	0.061	0.030	0.088					
I	0.014	0.043	0.080	0.044	0.168	0.043	0.073	0.047	0.160	0.022	0.022	0.049	0.038	0.090	0.022	0.045	0.032	0.135					
J	0.016	0.050	0.057	0.040	0.188	0.051	0.054	0.037	0.171	0.024	0.029	0.02	0.04	0.110	0.030	0.026	0.029	0.116					
K	0.026	0.065	0.053	0.034	0.252	0.065	0.051	0.031	0.221	0.034	0.044	0.022	0.028	0.174	0.045	0.023	0.023	0.166					
L	0.031	0.071	0.055	0.021	0.244	0.071	0.053	0.030	0.204	0.039	0.050	0.024	0.025	0.146	0.050	0.025	0.022	0.149					
M	0.038	0.078	0.066	0.029	0.178	0.077	0.055	0.028	0.165	0.046	0.057	0.035	0.023	0.100	0.056	0.037	0.020	0.110					
N	0.058	0.088	0.108	0.027	0.131	0.084	0.104	0.027	0.118	0.066	0.067	0.077	0.021	0.053	0.063	0.076	0.019	0.063					

(Continued)

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Table A1a (Continued)

Row	Load Point	Loca- tion	Vertical Pressure, psi, at Indicated Cells										Rebound									
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
8 & 10	2 & 1	Z	0.56	1.10	0.52	0.67	0.35	3.27	2.54	-0.21	1.39	0.09	0.92	1.22	0.09	0.47	0.17	3.50	2.54	1.73	1.57	0.84
		G	0.74	1.71	0.52	0.71	0.35	5.09	3.38	0.40	3.06	0.18	1.10	1.83	0.09	0.71	0.17	6.32	3.38	2.34	3.24	0.93
		H	0.56	1.71	0.60	0.96	0.35	4.51	3.59	1.01	3.84	0.18	0.92	1.83	0.17	0.95	0.27	4.74	3.59	2.95	4.72	0.93
		I	0.28	1.71	0.69	1.18	0.35	2.37	3.59	2.13	4.83	0.09	0.64	1.83	0.26	1.16	0.17	2.60	3.59	4.07	4.81	0.84
		J	0.19	1.71	0.69	1.18	0.35	1.35	3.28	0.61	4.80	-0.29	0.55	1.83	0.26	1.18	0.17	1.58	3.28	2.55	4.08	0.46
		K	0.28	1.58	0.52	1.18	0.35	1.12	2.95	-0.72	4.11	-0.66	0.64	1.70	0.09	1.18	0.17	1.35	2.96	1.22	4.20	0.09

Row	Load Point	Loca- tion	Vertical Deflection, in., at Indicated Gages										Rebound									
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
8 & 10	2 & 1	Z	0.061	0.072	0.021	0.015	0.009	0.073	0.095	0.117	0.011	0.067	0.063	0.070	0.012	0.068	0.063	0.067	0.011	0.064		
		G	0.025	0.044	0.134	0.033	0.047	0.047	0.113	0.034	0.062	0.051	0.037	0.123	0.029	0.069	0.046	0.037	0.105	0.028	0.075	
		H	0.013	0.036	0.110	0.038	0.079	0.039	0.024	0.039	0.107	0.039	0.027	0.099	0.034	0.036	0.029	0.046	0.033	0.120		
		I	0.008	0.034	0.063	0.041	0.101	0.038	0.058	0.040	0.127	0.034	0.025	0.052	0.037	0.119	0.028	0.030	0.034	0.140		
		J	0.010	0.040	0.142	0.037	0.131	0.047	0.041	0.037	0.114	0.036	0.031	0.031	0.033	0.150	0.037	0.033	0.031	0.157		
		K	0.017	0.052	0.038	0.031	0.166	0.042	0.039	0.031	0.159	0.043	0.043	0.027	0.027	0.184	0.052	0.031	0.025	0.172		

(10 of 11 sheets)

(Continued)

Table A14 (Continued)

Row	Loc- tion	Vertical Pressure, psi, at Indicated Cells									
		Total					Rebound				
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
11	I	0.19	0.61	1.20	0.36	0.35	0.68	1.27	-0.51	0.44	0.00
	C	0.19	0.73	1.11	0.36	0.35	1.47	1.69	-0.30	0.79	0.00
	D	0.28	0.85	1.03	0.36	0.35	1.81	1.90	-0.30	0.96	-0.10
	E	0.37	0.85	1.03	0.36	0.35	2.37	2.12	-0.30	1.22	0.00
	F	0.37	1.10	1.03	0.48	0.35	3.27	2.64	-0.10	1.75	0.09
	G	0.37	1.34	1.03	0.60	0.35	3.95	2.96	0.10	2.45	0.18
	H	0.28	1.34	1.11	0.84	0.35	2.94	3.17	0.61	3.23	0.09
	I	0.09	1.34	1.20	0.84	0.35	1.69	3.07	0.92	3.76	0.18
	J	0.09	1.34	1.20	0.84	0.35	1.02	2.85	0.31	3.84	0.09
	K	0.37	1.34	1.11	0.84	0.35	0.79	2.64	-0.51	3.32	0.00
	L	0.46	1.34	1.03	0.84	0.35	0.79	2.54	-0.71	2.97	0.00
	M	0.74	1.34	1.03	0.84	0.35	1.02	2.54	-0.81	2.53	0.09
	N	1.48	1.58	1.11	0.84	0.35	1.58	2.75	-0.91	2.18	0.09

Vertical Deflection, in., at Indicated Cells

Row	Loc- tion	Total									
		Total					Rebound				
		b ₁	b ₂	b ₃	b ₄	b ₅	b ₆	b ₇	b ₈	b ₉	b ₁₀
11	I	0.026	0.049	0.025	0.004	-0.001	0.070	0.046	0.005	0.001	0.001
	C	0.039	0.063	0.046	0.008	0.001	0.081	0.046	0.001	0.005	0.005
	D	0.041	0.069	0.055	0.010	0.003	0.065	0.058	0.014	0.007	0.007
	E	0.046	0.069	0.063	0.013	0.007	0.083	0.103	0.018	0.012	0.012
	F	0.039	0.060	0.091	0.021	0.017	0.072	0.112	0.027	0.028	0.028
	G	0.024	0.044	0.132	0.029	0.039	0.055	0.125	0.036	0.064	0.064
	H	0.015	0.035	0.108	0.035	0.061	0.045	0.104	0.042	0.112	0.112
	I	0.011	0.032	0.061	0.037	0.090	0.045	0.116	0.043	0.138	0.138
	J	0.013	0.036	0.043	0.035	0.125	0.053	0.050	0.039	0.156	0.156
	K	0.019	0.045	0.037	0.029	0.189	0.070	0.047	0.033	0.167	0.167
	L	0.023	0.051	0.038	0.026	0.160	0.077	0.051	0.031	0.154	0.154
	M	0.028	0.057	0.044	0.024	0.125	0.083	0.065	0.029	0.128	0.128
	N	0.038	0.067	0.060	0.023	0.086	0.090	0.096	0.028	0.090	0.090

Table A-15
Multiple-wheel Heavy Gear Load Flexible Pavement Test, Static Instrumentation Loading Data
Item 4; Load Condition: 30 kips per wheel, 12 wheels, 100 psi

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells												Rebound											
			Total						Rebound						Total						Rebound					
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁₁	P ₁₂	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁₁	P ₁₂
1	1	A	-0.20	4.09	1.46	1.92	0.40	0.36	4.13	0.00	1.47	0.20	-0.20	4.19	2.83	2.27	0.10	0.73	0.10	0.68	0.00	5.68	-0.70	1.55	0.20	0.41
		B	0.00	5.21	6.54	2.88	7.98	-0.37	5.80	-0.10	2.16	0.11	0.00	5.91	7.41	3.23	0.68	0.00	2.25	0.19	6.76	2.70	3.01	0.82	1.84	1.23
		C	0.00	6.48	12.20	3.83	2.55	-0.18	6.68	2.00	2.93	0.82	-0.20	6.86	13.07	4.18	3.62	0.46	0.73	5.47	0.00	7.34	4.30	4.65	3.28	4.30
		D	-0.20	6.76	12.09	4.31	3.92	1.09	7.34	2.60	3.36	1.23	-0.20	6.96	12.96	4.66	3.62	0.46	0.73	5.47	0.00	7.34	4.30	4.65	3.28	4.30
1 & 3	1 & 2	E	-0.20	6.96	10.24	5.03	5.77	0.36	7.69	2.60	3.88	1.00	-0.20	6.96	11.11	5.38	5.47	0.73	0.00	8.70	0.00	6.19	5.70	4.22	4.30	5.53
		F	0.00	6.57	10.68	5.87	9.00	-0.37	7.46	3.00	4.57	3.28	0.00	6.67	11.55	6.22	8.70	0.00	0.00	9.78	0.00	6.19	5.70	4.22	4.30	5.53
		G	0.00	5.24	13.73	6.23	10.08	-0.37	6.31	5.00	4.14	4.30	0.00	5.34	14.60	6.56	9.78	0.00	0.00	10.66	0.00	6.19	5.70	4.22	4.30	5.53
		H	0.00	3.71	7.42	6.23	10.96	-0.37	4.71	3.00	5.26	5.53	0.00	3.81	8.28	6.58	10.66	0.00	0.00	10.66	0.00	6.19	5.70	4.22	4.30	5.53
		I	0.00	2.86	1.96	5.75	11.15	-0.37	3.79	0.60	5.00	6.86	0.00	2.94	2.83	6.10	10.66	0.00	0.00	10.66	0.00	6.19	5.70	4.22	4.30	5.53
1	1	J	0.00	3.00	0.33	5.03	7.77	-0.37	3.67	-0.20	4.48	5.12	0.00	3.15	1.20	5.38	7.14	0.00	0.00	7.14	0.00	3.55	0.50	4.56	5.12	5.12
1 & 3	1 & 2	K	0.00	4.09	0.44	4.55	3.92	0.00	4.59	-0.40	4.14	2.56	0.00	4.19	1.31	4.90	7.62	0.37	0.00	7.62	0.37	4.47	0.30	4.22	2.56	2.56
		L	0.00	4.96	2.64	4.31	2.84	-0.18	5.39	-0.60	4.29	1.84	0.00	5.05	3.51	4.66	2.54	0.19	0.00	2.54	0.19	5.27	0.10	4.13	1.84	1.84
		M	0.00	5.62	3.60	4.43	2.35	-0.55	5.85	-0.50	4.25	1.43	0.00	5.72	4.47	4.76	2.35	-0.18	0.00	2.35	-0.18	5.73	0.20	4.13	1.43	1.43
		N	0.00	6.57	10.46	4.79	2.45	-0.55	7.00	1.20	4.22	1.02	0.00	6.67	11.33	5.14	2.15	-0.18	0.00	2.15	-0.18	6.88	1.90	4.30	1.02	1.02

Row	Load Point	Location	Vertical Deflection, in., at Indicated Cells												Rebound											
			Total						Rebound						Total						Rebound					
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀	D ₁₁	D ₁₂	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀	D ₁₁	D ₁₂
1	1	A	-0.008	0.031	-0.010	-0.000	0.000	0.005	-0.014	0.000	0.001	0.001	-0.013	0.046	0.000	0.001	-0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
		B	-0.007	0.045	-0.010	-0.008	-0.001	0.000	-0.013	0.000	0.000	0.000	-0.012	0.060	0.003	0.003	-0.007	0.005	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
		C	-0.004	0.045	-0.013	-0.003	0.001	0.000	-0.012	0.000	0.000	0.000	-0.009	0.060	0.006	0.006	-0.001	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
		D	-0.002	0.062	-0.012	-0.000	0.002	0.010	-0.012	0.000	0.000	0.000	-0.007	0.077	0.007	0.011	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1 & 3	1 & 2	E	0.002	0.062	-0.010	-0.005	0.004	0.000	-0.012	0.000	0.000	0.000	-0.003	0.077	0.007	0.011	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
		F	0.015	0.050	-0.008	-0.006	0.010	0.000	-0.011	0.000	0.001	0.001	0.010	0.065	0.011	0.025	0.008	0.008	0.005	0.005	0.005	0.005	0.005	0.000	0.000	0.000
		G	0.031	0.036	-0.008	-0.008	0.017	0.000	-0.011	0.000	0.003	0.003	0.028	0.051	0.011	0.033	0.015	0.015	0.003	0.003	0.003	0.003	0.000	0.000	0.000	0.000
		H	0.055	0.025	-0.009	-0.006	0.027	0.005	-0.011	0.000	0.005	0.005	0.050	0.040	0.010	0.045	0.025	0.025	0.002	0.002	0.002	0.002	0.000	0.000	0.000	0.000
		I	0.077	0.022	-0.011	-0.008	0.039	0.007	-0.011	0.000	0.007	0.007	0.072	0.037	0.008	0.053	0.037	0.037	0.004	0.004	0.004	0.004	0.000	0.000	0.000	0.000
1	1	J	0.099	0.027	-0.012	-0.005	0.049	0.013	-0.011	0.000	0.009	0.009	0.094	0.042	0.007	0.061	0.047	0.047	0.010	0.010	0.010	0.010	0.000	0.000	0.000	0.000
1 & 3	1 & 2	K	0.133	0.037	-0.011	-0.007	0.053	0.021	-0.011	0.000	0.009	0.009	0.126	0.052	0.007	0.061	0.051	0.051	0.010	0.010	0.010	0.010	0.000	0.000	0.000	0.000
		L	0.131	0.043	-0.011	-0.003	0.052	0.028	-0.011	0.000	0.006	0.006	0.126	0.052	0.008	0.061	0.051	0.051	0.010	0.010	0.010	0.010	0.000	0.000	0.000	0.000
		M	0.115	0.049	-0.011	-0.006	0.046	0.030	-0.010	0.000	0.007	0.007	0.110	0.044	0.005	0.061	0.051	0.051	0.010	0.010	0.010	0.010	0.000	0.000	0.000	0.000
		N	0.083	0.060	-0.009	-0.009	0.038	0.032	-0.009	0.000	0.006	0.006	0.078	0.075	0.010	0.062	0.036	0.036	0.005	0.005	0.005	0.005	0.000	0.000	0.000	0.000

(1 of 11 sheets)

(Continued)

Vertical Pressure and its Indicated Cells

Load row	Loca- tion	Vertical Pressure, psi, at Indicated Cells																			
		Total									Rebound										
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	F ₁	F ₂	F ₃	F ₄	F ₅	F ₆	F ₇	F ₈	F ₉		
2 & 4	1 & 2	5.22	7.34	15.91	5.02	4.89	75.01	8.49	6.51	14.82	2.15	5.82	7.53	13.85	5.25	4.49	74.47	6.37	1.60	4.30	2.05
	3	0.00	6.86	13.82	6.22	9.20	0.72	8.37	6.12	15.85	4.82	0.00	1.05	11.77	6.46	8.80	0.18	8.25	4.40	5.34	4.72
	4	0.00	5.43	21.36	5.93	10.47	0.54	6.83	8.11	16.54	6.25	0.00	5.62	19.29	7.17	10.07	0.00	6.76	6.40	6.03	6.15
	5	0.00	3.82	10.24	6.31	11.55	0.72	4.93	4.91	16.71	7.27	0.00	3.81	8.17	7.05	11.15	0.18	4.81	3.20	6.20	7.17
	6	0.00	2.75	3.71	6.22	12.23	0.84	3.79	2.12	16.19	8.40	0.00	2.95	1.64	6.46	11.83	0.00	3.67	0.40	5.68	8.30
	7	5.62	3.90	2.18	4.78	4.03	29.86	4.77	3.02	15.07	2.97	5.62	4.67	0.11	5.02	3.61	29.32	1.59	-0.70	4.56	2.87

1056 1057 1058 1059 1060 1061 1062 1063 1064 1065 1066 1067 1068 1069 1070 1071 1072 1073 1074 1075 1076 1077 1078 1079 1080 1081 1082 1083 1084 1085 1086 1087 1088 1089 1090 1091 1092 1093 1094 1095 1096 1097 1098 1099 1100 1101 1102 1103 1104 1105 1106 1107 1108 1109 1110 1111 1112 1113 1114 1115 1116 1117 1118 1119 1120 1121 1122 1123 1124 1125 1126 1127 1128 1129 1130 1131 1132 1133 1134 1135 1136 1137 1138 1139 1140 1141 1142 1143 1144 1145 1146 1147 1148 1149 1150 1151 1152 1153 1154 1155 1156 1157 1158 1159 1160 1161 1162 1163 1164 1165 1166 1167 1168 1169 1170 1171 1172 1173 1174 1175 1176 1177 1178 1179 1180 1181 1182 1183 1184 1185 1186 1187 1188 1189 1190 1191 1192 1193 1194 1195 1196 1197 1198 1199 1200 1201 1202 1203 1204 1205 1206 1207 1208 1209 1210 1211 1212 1213 1214 1215 1216 1217 1218 1219 1220 1221 1222 1223 1224 1225 1226 1227 1228 1229 1230 1231 1232 1233 1234 1235 1236 1237 1238 1239 1240 1241 1242 1243 1244 1245 1246 1247 1248 1249 1250 1251 1252 1253 1254 1255 1256 1257 1258 1259 1260 1261 1262 1263 1264 1265 1266 1267 1268 1269 1270 1271 1272 1273 1274 1275 1276 1277 1278 1279 1280 1281 1282 1283 1284 1285 1286 1287 1288 1289 1290 1291 1292 1293 1294 1295 1296 1297 1298 1299 1300 1301 1302 1303 1304 1305 1306 1307 1308 1309 1310 1311 1312 1313 1314 1315 1316 1317 1318 1319 1320 1321 1322 1323 1324 1325 1326 1327 1328 1329 1330 1331 1332 1333 1334 1335 1336 1337 1338 1339 1340 1341 1342 1343 1344 1345 1346 1347 1348 1349 1350 1351 1352 1353 1354 1355 1356 1357 1358 1359 1360 1361 1362 1363 1364 1365 1366 1367 1368 1369 1370 1371 1372 1373 1374 1375 1376 1377 1378 1379 1380 1381 1382 1383 1384 1385 1386 1387 1388 1389 1390 1391 1392 1393 1394 1395 1396 1397 1398 1399 1400 1401 1402 1403 1404 1405 1406 1407 1408 1409 1410 1411 1412 1413 1414 1415 1416 1417 1418 1419 1420 1421 1422 1423 1424 1425 1426 1427 1428 1429 1430 1431 1432 1433 1434 1435 1436 1437 1438 1439 1440 1441 1442 1443 1444 1445 1446 1447 1448 1449 1450 1451 1452 1453 1454 1455 1456 1457 1458 1459 1460 1461 1462 1463 1464 1465 1466 1467 1468 1469 1470 1471 1472 1473 1474 1475 1476 1477 1478 1479 1480 1481 1482 1483 1484 1485 1486 1487 1488 1489 1490 1491 1492 1493 1494 1495 1496 1497 1498 1499 1500 1501 1502 1503 1504 1505 1506 1507 1508 1509 1510 1511 1512 1513 1514 1515 1516 1517 1518 1519 1520 1521 1522 1523 1524 1525 1526 1527 1528 1529 1530 1531 1532 1533 1534 1535 1536 1537 1538 1539 1540 1541 1542 1543 1544 1545 1546 1547 1548 1549 1550 1551 1552 1553 1554 1555 1556 1557 1558 1559 1560 1561 1562 1563 1564 1565 1566 1567 1568 1569 1570 1571 1572 1573 1574 1575 1576 1577 1578 1579 1580 1581 1582 1583 1584 1585 1586 1587 1588 1589 1590 1591 1592 1593 1594 1595 1596 1597 1598 1599 1600 1601 1602 1603 1604 1605 1606 1607 1608 1609 1610 1611 1612 1613 1614 1615 1616 1617 1618 1619 1620 1621 1622 1623 1624 1625 1626 1627 1628 1629 1630 1631 1632 1633 1634 1635 1636 1637 1638 1639 1640 1641 1642 1643 1644 1645 1646 1647 1648 1649 1650 1651 1652 1653 1654 1655 1656 1657 1658 1659 1660 1661 1662 1663 1664 1665 1666 1667 1668 1669 1670 1671 1672 1673 1674 1675 1676 1677 1678 1679 1680 1681 1682 1683 1684 1685 1686 1687 1688 1689 1690 1691 1692 1693 1694 1695 1696 1697 1698 1699 1700 1701 1702 1703 1704 1705 1706 1707 1708 1709 1710 1711 1712 1713 1714 1715 1716 1717 1718 1719 1720 1721 1722 1723 1724 1725 1726 1727 1728 1729 1730 1731 1732 1733 1734 1735 1736 1737 1738 1739 1740 1741 1742 1743 1744 1745 1746 1747 1748 1749 1750 1751 1752 1753 1754 1755 1756 1757 1758 1759 1760 1761 1762 1763 1764 1765 1766 1767 1768 1769 1770 1771 1772 1773 1774 1775 1776 1777 1778 1779 1780 1781 1782 1783 1784 1785 1786 1787 1788 1789 1790 1791 1792 1793 1794 1795 1796 1797 1798 1799 1800 1801 1802 1803 1804 1805 1806 1807 1808 1809 1810 1811 1812 1813 1814 1815 1816 1817 1818 1819 1820 1821 1822 1823 1824 1825 1826 1827 1828 1829 1830 1831 1832 1833 1834 1835 1836 1837 1838 1839 1840 1841 1842 1843 1844 1845 1846 1847 1848 1849 1850 1851 1852 1853 1854 1855 1856 1857 1858 1859 1860 1861 1862 1863 1864 1865 1866 1867 1868 1869 1870 1871 1872 1873 1874

Vertical Reflection, In., at Indicated Gages															
Total												Rebound			
	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀	D ₁₁	D ₁₂	D ₁₃	D ₁₄	D ₁₅
F	0.010	0.108	0.215	0.021	0.009	0.010	0.003	0.000	-0.001						
F	0.027	0.005	0.023	0.034	0.014	0.007	0.004	0.000	0.001						
F	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.000	0.003						
H	0.103	0.000	0.018	0.070	0.045	0.001	0.004	0.000	0.000						
F	0.129	0.242	0.275	0.090	0.000	0.001	0.003	0.000	0.010						
F	0.030	0.000	0.012	0.057	0.001	0.013	0.001	0.000	0.012						

(continued)

Table A15 (Continued)

Row	Loca- tion	Vertical Pressure, psi, at Indicated Cells									
		Total					Rebound				
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
1,3,5	2,1,2	A	30.92	3.72	1.31	1.79	0.29	74.12	5.16	0.20	1.55
		B	-6.63	5.15	5.01	2.53	0.88	0.18	6.99	1.30	0.51
		C	-6.43	6.32	16.77	3.95	2.05	0.37	8.48	5.00	3.12
		D	13.05	6.86	17.21	4.54	3.73	24.34	8.94	5.40	1.84
		E	6.06	7.06	13.29	5.14	4.89	38.42	9.17	4.60	2.97
		F	-13.66	6.86	13.07	6.10	8.70	0.37	8.83	4.70	5.73
		G	-13.66	5.53	22.11	6.82	10.27	0.18	6.88	6.01	7.17
		H	-13.66	3.62	9.80	6.94	11.83	0.18	4.93	3.10	7.90
		I	-13.46	2.67	2.61	6.34	13.10	0.37	3.78	0.20	8.81
2 & 2		J	-13.66	2.67	0.76	5.38	8.31	0.30	3.78	-0.80	6.14
2,1,2		K	9.64	3.62	0.55	4.30	4.20	19.16	5.04	-0.70	3.07
1 & 5	2 & 2	L	10.84	4.58	1.52	4.66	2.64	59.94	6.16	-0.40	4.65
		M	-14.46	5.15	3.70	4.80	2.05	2.55	6.99	0.40	1.23
		N	-14.46	6.29	14.60	5.02	2.05	0.00	8.37	1.40	1.02

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Row	Loca- tion	Vertical Reflection, in., at Indicated Cells									
		Total					Rebound				
		R ₁	R ₂	R ₃	R ₄	R ₅	R ₆	R ₇	R ₈	R ₉	R ₁₀
1,3,5	2,1,2	A	-0.002	0.008	0.007	0.003	-0.003	0.001	0.000	-0.001	0.000
		B	-0.001	0.002	0.011	0.007	0.000	0.002	0.000	0.000	0.000
		C	0.002	0.006	0.016	0.015	0.002	0.000	0.000	0.000	0.000
		D	0.005	0.005	0.019	0.002	0.005	0.004	0.000	0.000	0.001
		E	0.011	0.022	0.002	0.030	0.009	0.009	0.005	0.000	0.002
		F	0.008	0.016	0.005	0.046	0.018	0.008	0.000	0.000	0.004
		G	0.056	0.124	0.007	0.034	0.034	0.018	0.004	0.000	0.006
		H	0.174	0.100	0.024	0.093	0.054	0.013	0.009	0.000	0.002
2 & 2		I	0.195	0.093	0.030	0.122	0.072	0.012	0.005	0.000	0.002
2,1,2		J	0.198	0.100	0.017	0.105	0.034	0.016	0.000	0.000	0.002
1 & 5	2 & 2	K	0.259	0.114	0.016	0.077	0.119	0.023	0.004	0.005	0.002
		L	0.241	0.126	0.017	0.061	0.103	0.028	0.004	0.005	0.002
		M	0.270	0.133	0.018	0.054	0.095	0.031	0.005	0.000	0.019
		N	0.165	0.153	0.021	0.049	0.074	0.036	0.004	0.000	0.015

(Continued)

(3 of 11 sheets)

Table A15 (Continued)

Row	Load Point	Loca- tion	Vertical Pressure, psi, at Indicated Cells																			
			Total										Rebound									
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	F ₁	F ₂	F ₃	F ₄	F ₅	F ₆	F ₇	F ₈	F ₉	F ₁₀
2 & 4	2 & 1	E	0.00	6.87	8.06	4.54	4.11	-0.91	9.17	3.50	4.99	3.18	0.00	7.06	9.15	1.78	3.82	0.00	9.17	5.51	4.99	3.28
		F	0.00	6.67	11.87	5.74	7.83	-0.91	8.71	4.00	6.20	6.35	0.00	5.86	12.95	5.98	7.54	0.00	8.71	6.01	6.20	6.45
		G	0.00	5.34	19.39	6.22	9.29	-0.91	7.11	1.42	6.80	7.79	0.00	5.83	20.48	4.46	9.00	0.00	7.11	0.59	6.40	7.89
		H	0.00	3.62	9.15	6.46	11.54	-0.91	5.04	2.20	6.89	8.30	0.00	5.31	10.24	6.70	11.25	0.00	5.04	4.21	6.69	8.10
		I	0.00	2.48	1.20	5.74	13.21	-0.91	3.67	-0.90	6.37	8.81	0.00	2.67	2.29	5.98	12.92	0.00	3.67	1.11	6.37	8.91
		K	0.00	3.15	-0.44	4.42	4.50	-0.72	4.93	-1.60	5.17	3.18	0.00	3.34	0.65	4.66	4.21	0.19	4.93	0.41	5.17	3.28

	Vertical Deflection, in., at Indicated Gages																		
	Total					Retourd													
	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉		E ₁	E ₂	E ₃	E ₄	E ₅	E ₆	E ₇	E ₈	E ₉
E	0.010	0.206	0.021	0.034	0.010	0.040	0.007	0.000	0.001	-0.002	0.151	0.001	-0.087	-0.009	0.044	-0.006	0.000	0.000	
F	0.069	0.196	0.050	0.178	0.025	0.035	0.024	0.000	0.006	0.057	0.101	0.030	0.057	0.005	0.039	0.011	0.000	0.005	
G	0.100	0.116	0.052	0.205	0.045	0.027	0.025	0.000	0.012	0.068	0.061	0.032	0.064	0.026	0.031	0.012	0.000	0.011	
H	0.160	0.090	0.049	0.242	0.070	0.020	0.023	0.000	0.019	0.148	0.035	0.029	0.121	0.051	0.024	0.010	0.000	0.016	
I	0.193	0.062	0.041	0.286	0.098	0.019	0.021	0.000	0.027	0.181	0.027	0.021	0.165	0.079	0.023	0.008	0.000	0.026	
K	0.229	0.111	0.037	0.215	0.130	0.029	0.020	0.000	0.034	0.217	0.056	0.017	0.094	0.111	0.033	0.007	0.000	0.033	

Table A-15(Continued)

Row	Load Point	Location	Vertical Pressure, psi, at Indicated Cells										Rebound									
			Total					Rebound					Total					Rebound				
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	F ₁	F ₂	F ₃	F ₄	F ₅	F ₆	F ₇	F ₈	F ₉	F ₁₀
5	1	A	0.00	2.86	0.08	1.43	0.20	0.00	5.27	0.61	1.63	0.30	0.00	3.14	1.09	1.55	0.39	0.18	5.27	2.51	1.63	0.30
		B	0.00	4.01	1.41	2.15	0.59	-0.55	7.11	1.41	2.41	0.61	0.00	4.29	1.74	2.27	0.78	-0.37	7.11	3.31	2.41	0.61
		C	0.00	5.34	3.27	3.11	1.37	-0.37	8.71	4.21	3.62	1.23	0.00	5.62	3.40	3.23	1.56	-0.19	8.71	6.11	3.62	1.23
		D	5.42	5.63	3.92	3.59	2.15	-0.37	9.17	5.01	4.31	1.44	5.42	5.91	4.25	3.71	2.34	-0.19	9.17	6.91	4.31	1.44
5 & 6	1 & 2	E	10.04	6.29	4.14	4.30	3.13	-0.37	9.63	4.41	4.99	3.17	10.04	5.77	4.47	4.42	3.32	-0.19	9.63	6.31	4.99	3.17
		F	0.00	6.39	10.67	5.26	5.28	-0.37	9.17	4.01	6.19	6.28	0.00	6.67	11.00	5.38	5.47	-0.19	9.17	5.91	6.19	6.28
		G	0.00	5.05	22.87	5.86	7.24	-0.37	7.22	5.11	6.98	7.89	0.00	5.33	22.20	5.98	7.43	-0.19	7.22	7.01	6.98	7.89
		H	0.00	3.43	11.33	5.98	9.98	-0.18	5.04	3.21	7.06	8.40	0.00	3.71	11.66	6.10	10.17	0.30	5.34	5.11	7.06	8.40
5	1	I	0.00	2.39	2.83	5.50	12.91	-0.18	3.67	-0.20	6.54	9.22	0.00	2.67	3.45	5.62	13.10	0.00	3.67	1.70	6.54	9.22
		J	0.00	2.29	0.97	4.78	8.22	-0.37	3.67	-1.20	5.68	6.14	0.00	2.57	1.20	4.90	8.41	-0.19	3.67	0.70	5.68	6.14
5 & 6	1 & 2	K	0.00	2.96	0.65	4.07	3.62	-0.37	5.27	-1.00	4.99	2.87	0.00	3.24	0.98	4.19	3.81	-0.19	5.27	0.90	4.99	2.87
5	1	L	0.00	3.62	0.76	4.07	2.45	-0.37	6.30	-0.40	4.82	1.74	0.00	3.90	0.69	4.49	2.64	-0.19	6.30	1.50	4.82	1.74
		M	0.00	4.20	1.31	3.95	1.76	-0.37	7.22	0.61	4.82	1.23	0.00	4.48	1.64	4.07	1.95	-0.19	7.22	2.51	4.82	1.23
		N	0.00	5.34	3.70	4.30	1.57	-0.55	8.71	3.41	5.17	1.12	0.00	5.62	4.03	4.42	1.76	-0.55	8.71	5.31	5.17	1.12

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Row	Load Point	Location	Vertical Deflection, in., at Indicated Gages										Rebound									
			Total					Rebound					Total					Rebound				
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀	F ₁	F ₂	F ₃	F ₄	F ₅	F ₆	F ₇	F ₈	F ₉	F ₁₀
5	1	A	-0.005	0.101	0.014	0.003	-0.002	0.054	0.004	0.000	-0.002	0.000	0.024	0.096	0.000	-0.353	-0.028	0.053	0.002	0.000	-0.007	0.000
		B	-0.004	0.127	0.022	0.011	0.000	0.048	0.006	0.000	-0.002	0.000	0.025	0.122	0.008	-0.325	-0.026	0.049	0.004	0.000	-0.007	0.000
		C	0.001	0.158	0.034	0.028	0.004	0.063	0.010	0.000	0.000	0.000	0.030	0.153	0.020	-0.008	-0.022	0.064	0.008	0.000	-0.009	0.000
		D	0.005	0.193	0.042	0.045	0.008	0.072	0.012	0.000	0.000	0.000	0.034	0.188	0.028	0.009	-0.018	0.075	0.010	0.000	-0.009	0.000
5 & 6	1 & 2	E	0.011	0.213	0.048	0.066	0.013	0.074	0.014	0.000	0.003	0.000	0.040	0.208	0.034	0.030	-0.015	0.075	0.012	0.000	-0.002	0.000
		F	0.031	0.156	0.055	0.119	0.029	0.062	0.017	0.000	0.009	0.000	0.093	0.098	0.043	0.041	0.030	0.063	0.015	0.000	0.004	0.000
		G	0.064	0.103	0.057	0.152	0.056	0.046	0.017	0.000	0.017	0.000	0.141	0.068	0.038	0.146	0.062	0.036	0.014	0.000	0.021	0.000
		H	0.112	0.073	0.052	0.182	0.088	0.035	0.016	0.000	0.026	0.000	0.179	0.057	0.026	0.191	0.090	0.031	0.011	0.000	0.032	0.000
		I	0.150	0.062	0.043	0.227	0.118	0.030	0.013	0.000	0.037	0.000	0.204	0.072	0.022	0.158	0.120	0.035	0.009	0.000	0.044	0.000
5	1	J	0.175	0.077	0.036	0.194	0.146	0.034	0.011	0.000	0.046	0.000	0.219	0.110	0.021	0.101	0.131	0.045	0.007	0.000	0.049	0.000
5 & 6	1 & 2	K	0.190	0.115	0.035	0.137	0.157	0.044	0.009	0.000	0.054	0.000	0.205	0.127	0.023	0.078	0.125	0.045	0.000	0.000	0.047	0.000
5	1	L	0.176	0.132	0.037	0.114	0.151	0.050	0.011	0.000	0.062	0.000	0.177	0.138	0.026	0.082	0.111	0.037	0.000	0.000	0.043	0.000
		M	0.148	0.143	0.040	0.098	0.137	0.056	0.011	0.000	0.048	0.000	0.165	0.157	0.032	0.051	0.079	0.021	0.000	0.000	0.043	0.000
		N	0.096	0.162	0.046	0.087	0.105	0.020	0.013	0.000	0.037	0.000	0.165	0.157	0.032	0.051	0.079	0.021	0.000	0.000	0.043	0.000

(Continued)

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Table A15(Continued)

Row	Loca- tion	Vertical Pressure, psi, at Indicated Cells																				
		Total					Rebound															
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀											
6	1	E	0.20	4.57	2.29	3.35	1.56	112.52	9.07	7.91	4.74	2.97	0.20	5.24	2.61	3.59	2.34	111.61	8.95	3.60	4.75	2.56
		F	0.20	4.67	7.08	4.19	2.74	1.09	9.06	7.71	6.03	6.76	0.20	5.34	7.40	4.43	3.52	0.18	8.95	3.40	6.04	6.35
		G	0.00	3.81	13.18	4.66	4.01	1.09	7.34	11.12	6.80	7.99	0.00	4.48	13.50	4.90	4.79	0.18	7.23	6.81	7.58	
		H	0.20	2.57	5.88	4.78	6.94	1.09	5.04	7.31	6.89	9.22	0.20	3.24	6.20	5.02	7.72	0.18	4.93	3.00	6.90	8.81
		I	0.20	1.81	1.31	4.42	9.39	0.07	3.67	3.31	6.37	10.66	0.20	2.18	1.63	4.66	10.17	3.56	3.56	-1.00	6.38	10.25
		K	0.20	2.00	0.01	3.35	2.74	67.91	4.81	2.71	4.91	3.79	0.20	2.67	0.04	3.59	3.52	4.70	4.70	-1.60	4.92	3.38

Row	Loca- tion	Vertical Deflection, in., at Indicated Gages																			
		Total					Rebound														
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀										
6	1	E	-0.001	0.256	0.019	-0.035	0.017	0.195	-0.001	2.000	0.008	-0.006	0.170	0.033	0.032	-0.010	0.143	0.009	0.000	-0.007	
		F	0.017	0.190	0.027	0.026	0.039	0.145	0.003	0.000	0.018	-0.080	0.104	0.041	0.093	0.012	0.093	0.013	0.000	0.003	
		G	0.047	0.138	0.089	0.051	0.075	0.110	0.000	0.000	0.031	-0.050	0.052	0.043	0.118	0.048	0.058	0.016	0.000	0.016	
		H	0.174	0.107	0.024	0.073	0.117	0.089	0.000	0.000	0.049	0.077	0.021	0.036	0.140	0.090	0.037	0.016	0.000	0.034	
		I	0.207	0.100	0.015	0.098	0.119	0.082	0.004	0.000	0.068	0.110	0.014	0.029	0.15	0.122	0.030	0.014	0.000	0.053	
		K	0.296	0.216	0.008	0.016	0.174	0.107	0.001	0.000	0.094	0.199	0.130	0.082	0.04	0.055	0.011	0.000	0.000	0.079	

(Continued)

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Table A15(Continued)

Row	Load Point	Loca- tion	Vertical Pressure, psi, at Indicated Cells									
			Total					Rebound				
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
7	1	B	0.00	1.81	-0.04	1.32	-0.20	-0.91	5.39	0.20	2.07	0.41
		C	0.00	2.58	0.00	1.91	0.20	0.73	7.00	0.50	3.02	1.03
		D	6.63	2.56	0.33	2.15	0.59	40.79	7.57	0.30	3.53	1.14
7 & 9	1 & 2	E	0.00	2.86	0.44	2.39	0.78	55.72	8.03	0.30	4.05	2.05
		F	0.00	2.96	0.98	2.99	1.56	-0.18	8.14	3.00	5.00	3.79
		G	0.00	2.48	1.09	3.35	2.35	-0.18	6.54	7.31	5.69	5.33
		H	0.00	1.81	0.22	3.35	3.13	-0.18	4.59	3.70	5.86	7.58
		I	0.00	1.34	-0.65	3.11	3.52	-0.18	3.21	-0.10	5.43	10.25
7	1	J	0.00	1.15	-0.87	2.87	2.35	-0.36	2.98	-1.10	4.74	7.89
7 & 9	1 & 2	K	0.00	1.53	-0.87	2.51	0.98	-0.55	4.02	-0.80	4.14	3.49
7	1	L	0.00	1.72	-0.87	2.39	0.59	-0.73	4.70	-0.70	3.96	2.26
		M	0.00	2.10	-0.65	2.51	0.29	-0.73	5.39	-0.30	3.88	1.64
		N	0.00	2.67	-0.33	2.63	0.20	-0.73	6.88	0.50	4.14	1.23

Row	Load Point	Loca- tion	Vertical Deflection, in., at Indicated Gages									
			Total					Rebound				
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
7	1	B	-0.057	0.166	0.035	0.013	-0.001	0.153	0.020	0.000	-0.001	
		C	-0.003	0.171	0.052	0.039	0.005	0.185	0.030	0.000	0.004	
		D	0.000	0.210	0.061	0.063	0.011	0.218	0.036	0.000	0.008	
7 & 9	1 & 2	E	0.004	0.213	0.062	0.092	0.017	0.234	0.001	0.000	0.013	
		F	0.020	0.147	0.077	0.172	0.041	0.169	0.048	0.000	0.031	
		G	0.040	0.088	0.079	0.212	0.061	0.117	0.051	0.000	0.057	
		H	0.064	0.070	0.070	0.241	0.130	0.087	0.046	0.000	0.089	
		I	0.093	0.043	0.055	0.272	0.168	0.078	0.038	0.000	0.118	
7	1	J	0.129	0.068	0.045	0.230	0.195	0.094	0.032	0.000	0.142	
7 & 9	1 & 2	K	0.203	0.141	0.044	0.152	0.202	0.142	0.031	0.000	0.153	
7	1	L	0.186	0.164	0.046	0.126	0.193	0.159	0.032	0.000	0.145	
		M	0.143	0.176	0.050	0.177	0.174	0.170	0.037	0.000	0.136	
		N	0.073	0.191	0.062	0.094	0.129	0.191	0.041	0.000	0.104	

(Continued)

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Table A15(Continued)

Row	Loca- tion	Vertical Pressure, psi, at Indicated Gages									
		P ₁	P ₂	P ₃	P ₄	P ₅	Total P ₆	P ₇	P ₈	P ₉	P ₁₀
8 & 10	1 & 2	E	0.00	2.38	0.55	1.79	0.49	93.95	7.57	1.60	3.79
		F	0.00	2.38	0.38	2.27	0.98	1.09	7.57	4.40	4.56
		G	0.00	2.00	0.98	2.51	1.56	0.91	6.08	8.81	5.15
		H	0.00	1.52	0.44	2.51	2.05	0.73	4.36	4.80	5.34
		I	0.00	1.14	0.00	2.39	2.15	0.73	3.21	1.60	4.91
		K	0.00	1.33	-0.21	2.03	0.69	0.36	3.67	1.20	3.95

Row	Loca- tion	Vertical Reflection, in., at Indicated Gages									
		D ₁	D ₂	D ₃	D ₄	Total D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
8 & 10	1 & 2	E	0.006	0.274	0.046	0.074	0.016	0.270	0.036	0.000	0.015
		F	0.016	0.222	0.053	0.130	0.034	0.219	0.042	0.000	0.031
		G	0.033	0.161	0.056	0.165	0.075	0.163	0.045	0.000	0.062
		H	0.052	0.128	0.050	0.190	0.119	0.134	0.041	0.000	0.086
		I	0.077	0.118	0.039	0.221	0.155	0.126	0.031	0.000	0.125
		K	0.252	0.226	0.032	0.126	0.181	0.218	0.029	0.000	0.145

(Continued)

(8 of 11 sheets)

Table A15 (Continued)

Row	Load Point	Loca- tion	Vertical Pressure, psi, at Indicated Gages										Rebound									
			P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀	P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
7 & 11	2 & 2	B	0.00	1.43	0.98	0.96	0.19	-0.18	3.79	0.40	1.55	0.20	0.00	1.43	0.22	1.08	0.29	0.00	4.36	2.41	1.89	0.61
		C	0.00	1.72	1.20	1.20	0.59	-0.36	4.93	0.80	2.42	0.61	0.00	1.72	0.44	1.32	0.39	-0.18	5.50	2.81	2.76	1.02
7,9,11	2,1,2	D	0.00	1.81	1.20	1.32	0.69	0.00	5.39	0.80	2.67	0.92	0.00	1.81	0.44	1.44	0.49	0.18	5.96	2.81	3.01	1.33
		E	0.00	1.90	0.76	1.68	0.58	0.55	6.42	1.71	3.36	1.23	0.00	2.00	1.09	1.68	0.68	0.00	6.54	1.61	3.44	1.44
		F	0.00	1.81	0.98	1.91	0.88	0.18	6.42	3.91	4.22	2.25	0.00	1.91	1.31	1.91	0.98	-0.37	5.54	3.81	4.30	2.46
		G	0.00	1.62	0.98	2.15	1.17	0.18	5.39	5.91	4.74	3.48	0.00	1.72	1.31	2.15	1.27	-0.37	5.51	5.81	4.82	3.69
7 & 11	2 & 2	H	0.00	1.23	0.54	2.15	1.46	0.36	3.90	3.11	4.83	5.53	0.00	1.33	0.87	2.15	1.56	-0.19	4.02	3.01	4.91	5.64
		I	0.00	1.04	0.32	2.03	1.37	0.18	2.98	1.21	4.57	7.37	0.00	1.14	0.65	2.03	1.17	-0.37	3.10	1.11	4.55	7.58
		J	0.00	1.04	0.10	1.91	0.98	0.18	2.75	0.71	3.99	5.12	0.00	1.14	0.43	1.91	1.08	-0.37	2.87	0.61	4.07	5.33
		K	0.00	1.33	0.10	1.80	0.58	0.18	3.21	0.71	3.53	2.87	0.00	1.43	0.43	1.80	0.68	-0.37	3.33	0.61	3.61	3.06
		L	0.00	1.53	0.55	1.68	0.69	-0.36	3.33	-0.50	3.10	1.64	0.00	1.53	0.22	1.80	0.49	0.18	3.90	1.51	3.44	2.05
		M	0.00	1.81	1.09	1.68	0.59	-0.36	4.02	-0.20	3.10	1.12	0.00	1.81	0.33	1.80	0.39	-0.18	4.59	1.81	3.44	1.53
		N	0.00	2.10	1.42	1.91	0.59	-0.36	5.16	0.00	3.28	0.82	0.00	2.10	0.66	2.03	0.19	-0.18	5.73	2.01	3.62	1.23

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Table A15 (Continued)

Row	Load Point	Loca- tion	Vertical Deflection, in., at Indicated Gages										Rebound									
			D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
7 & 11	2 & 2	B	-0.008	0.213	0.023	0.008	-0.003	0.192	0.021	0.000	0.000	0.000	0.010	0.064	0.011	-0.026	-0.031	0.104	0.011	0.000	-0.327	-0.021
		C	-0.005	0.257	0.038	0.026	0.003	0.219	0.033	0.000	0.006	0.006	0.013	0.108	0.029	-0.008	-0.025	0.131	0.023	0.000	-0.021	-0.021
7,9,11	2,1,2	D	-0.004	0.308	0.044	0.040	0.006	0.244	0.038	0.000	0.010	0.010	0.014	0.159	0.035	0.006	-0.022	0.156	0.028	0.000	-0.017	-0.017
		E	0.004	0.252	0.049	0.069	0.014	0.216	0.041	0.000	0.015	0.015	-0.021	0.209	0.048	0.056	0.008	0.174	0.039	0.000	0.011	0.011
		F	0.014	0.169	0.058	0.135	0.037	0.152	0.047	0.000	0.039	0.039	-0.011	0.126	0.057	0.122	0.031	0.110	0.045	0.000	0.035	0.035
		G	0.027	0.116	0.059	0.164	0.074	0.105	0.048	0.000	0.074	0.074	0.002	0.273	0.052	0.151	0.068	0.063	0.046	0.000	0.070	0.070
7 & 11	2 & 2	H	0.044	0.085	0.052	0.193	0.116	0.075	0.043	0.000	0.109	0.109	0.019	0.042	0.051	0.150	0.110	0.033	0.041	0.000	0.105	0.105
		I	0.065	0.076	0.041	0.227	0.145	0.069	0.035	0.000	0.133	0.133	0.040	0.033	0.040	0.214	0.139	0.097	0.033	0.000	0.129	0.129
		J	0.096	0.026	0.042	0.181	0.172	0.098	0.028	0.000	0.151	0.151	0.071	0.053	0.041	0.168	0.166	0.056	0.026	0.000	0.147	0.147
		K	0.139	0.173	0.031	0.127	0.180	0.174	0.028	0.000	0.153	0.153	0.114	0.130	0.030	0.114	0.174	0.132	0.026	0.000	0.149	0.149
		L	0.101	0.285	0.035	0.110	0.174	0.240	0.033	0.000	0.151	0.151	0.119	0.136	0.026	0.076	0.146	0.152	0.023	0.000	0.124	0.124
		M	0.091	0.280	0.038	0.092	0.155	0.236	0.035	0.000	0.136	0.136	0.099	0.131	0.029	0.058	0.148	0.148	0.025	0.000	0.109	0.109
		N	0.043	0.313	0.050	0.080	0.138	0.251	0.045	0.000	0.099	0.099	0.061	0.164	0.041	0.046	0.080	0.163	0.035	0.000	0.072	0.072

(Continued)

(9 of 11 sheets)

Table A15(Continued)

Row	Loca- tion	Vertical Pressure, psi, at Indicated Cells									
		Total									
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
8 & 10	2 & 1	-0.20	1.62	1.52	1.20	0.88	-0.55	5.16	1.21	2.84	1.03
	E	-0.20	1.53	1.63	1.44	0.95	-0.37	5.28	1.81	3.44	1.64
	F	-0.20	1.34	1.63	1.68	1.27	0.00	4.48	2.21	3.96	2.46
	G	-0.20	1.14	1.41	1.68	1.27	0.00	3.21	0.71	4.05	3.90
	H	-0.20	1.05	1.31	1.68	1.27	0.00	2.41	-0.30	3.79	4.92
	I	-0.20	1.33	1.31	1.44	0.78	0.00	2.64	-0.80	3.01	1.85
	K	-0.20	1.33	1.31	1.44	0.78	0.00	2.64	-0.80	3.01	1.85

Row	Loca- tion	Vertical Deflection, in., at Indicated Gages									
		Total									
		D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	D ₇	D ₈	D ₉	D ₁₀
8 & 10	2 & 1	-0.002	0.169	0.046	0.056	0.011	0.158	0.045	0.000	0.038	0.038
	E	0.004	0.113	0.053	0.102	0.027	0.119	0.051	0.000	0.038	0.038
	F	0.014	0.059	0.056	0.134	0.057	0.072	0.053	0.000	0.074	0.074
	G	0.028	0.086	0.050	0.176	0.100	0.040	0.047	0.000	0.115	0.115
	H	0.045	0.014	0.039	0.217	0.131	0.035	0.038	0.000	0.143	0.143
	I	0.074	0.075	0.030	0.112	0.168	0.122	0.032	0.000	0.157	0.157

Row	Loca- tion	Rebound									
		R ₁	R ₂	R ₃	R ₄	R ₅	R ₆	R ₇	R ₈	R ₉	R ₁₀
8 & 10	2 & 1	0.00	1.52	0.43	1.20	0.59	-0.36	3.50	1.01	3.02	1.44
	E	0.00	1.43	0.54	1.44	0.69	-0.18	3.62	4.61	3.62	2.06
	F	0.00	1.24	0.54	1.28	0.98	0.19	4.82	5.01	4.34	2.87
	G	0.00	1.04	0.32	1.68	0.98	0.19	3.55	3.51	4.51	4.31
	H	0.00	0.95	0.22	1.68	0.98	0.19	2.75	2.50	3.97	5.33
	I	0.00	1.23	0.22	1.44	0.49	0.19	2.98	2.50	3.19	2.26

Row	Loca- tion	Rebound									
		R ₁	R ₂	R ₃	R ₄	R ₅	R ₆	R ₇	R ₈	R ₉	R ₁₀
8 & 10	2 & 1	0.034	0.218	0.041	0.038	0.031	0.197	0.037	0.000	0.003	0.003
	E	0.040	0.162	0.048	0.084	0.017	0.158	0.043	0.000	0.003	0.003
	F	0.050	0.108	0.051	0.116	0.057	0.111	0.045	0.000	0.059	0.059
	G	0.064	0.07	0.045	0.158	0.090	0.079	0.039	0.000	0.103	0.103
	H	0.081	0.074	0.034	0.199	0.121	0.074	0.030	0.000	0.128	0.128
	I	0.10	0.124	0.025	0.094	0.158	0.161	0.024	0.000	0.142	0.142

(Continued)

(10 of 11 sheets)

Table A15 (Concluded)

Row	Point	Vertical Pressure, Psi, at Indicated Gages									
		Total					Rebound				
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
11	1	0.20	0.95	2.07	0.72	0.79	0.19	2.86	0.20	1.29	0.10
	B	0.20	1.15	1.96	0.84	0.88	-0.18	3.55	0.50	1.81	0.31
	C	0.00	1.15	1.96	0.96	0.98	-0.18	4.01	0.80	2.15	0.51
	D	0.00	1.24	1.96	0.96	0.98	-0.18	4.24	1.00	2.32	0.61
	E	0.20	1.24	1.96	1.20	1.18	0.00	4.24	1.40	2.93	1.23
	F	0.20	1.14	1.96	1.32	1.27	0.19	3.55	1.40	3.27	1.84
	G	0.20	0.95	1.85	1.32	1.37	0.19	2.63	0.60	3.36	2.56
	H	0.00	0.95	1.74	1.20	1.37	0.19	1.94	0.10	3.19	3.07
	I	0.00	1.05	1.74	1.20	1.18	0.19	1.94	-0.10	2.84	2.35
	J	0.00	1.34	1.85	1.20	0.98	0.19	2.29	-0.20	2.67	1.33
	K	0.00	1.53	1.96	1.32	0.88	0.19	2.03	0.00	2.50	1.02
	L	0.20	1.72	2.18	1.32	0.79	0.19	3.09	0.10	2.50	0.71
	M	0.00	1.91	2.61	1.56	0.98	-0.18	3.78	0.10	2.67	0.61
	N										

Row	Point	Vertical Reflection, in., at Indicated Gages									
		Total					Rebound				
		P ₁	P ₂	P ₃	P ₄	P ₅	P ₆	P ₇	P ₈	P ₉	P ₁₀
11	1	-0.009	0.102	0.017	0.005	-0.003	0.176	0.023	0.000	0.000	0.000
	B	-0.008	0.111	0.028	0.015	0.000	0.197	0.035	0.000	0.004	0.004
	C	-0.006	0.205	0.034	0.026	0.004	0.213	0.042	0.000	0.010	0.010
	D	-0.005	0.248	0.041	0.039	0.007	0.214	0.043	0.000	0.016	0.016
	E	0.000	0.170	0.048	0.071	0.022	0.164	0.054	0.000	0.040	0.040
	F	0.008	0.115	0.050	0.100	0.045	0.112	0.055	0.000	0.076	0.076
	G	0.020	0.082	0.045	0.152	0.079	0.076	0.049	0.000	0.118	0.118
	H	0.034	0.070	0.034	0.204	0.111	0.071	0.040	0.000	0.147	0.147
	I	0.049	0.079	0.027	0.167	0.141	0.100	0.033	0.000	0.165	0.165
	J	0.077	0.104	0.025	0.109	0.157	0.159	0.032	0.000	0.166	0.166
	K	0.054	0.118	0.026	0.085	0.152	0.183	0.033	0.000	0.158	0.158
	L	0.047	0.131	0.029	0.068	0.134	0.193	0.036	0.000	0.140	0.140
	M	0.031	0.157	0.035	0.058	0.101	0.206	0.044	0.000	0.109	0.109
	N										

(11 of 11 sheets)

Table A-16

Multiple-Wheel Heavy-Axle Load Flexible Pavement Test, Dynamic Instrumentation Loading Data
Item 3; Load Condition: 30 kips, Single Wheel, 100 psi

Vertical Pressure, psi, at Indicated Cells														
Row	Position	Location	Forward, Avg Speed = 1.50 mph					Position	Location	Reverse, Avg Speed = 2.50 mph				
			P ₁	P ₂	P ₃	P ₄	P ₅			P ₁	P ₂	P ₃	P ₄	P ₅
5	0	18W	-1.81	-0.14	-2.10	-1.24	--	0	12E	--	0.03	--	0.02	--
		15E	--	-0.12	-2.12	-0.23	--		10E	0.05	0.06	--	0.02	--
		14E	-1.00	-0.10	-2.12	-0.23	--		8E	0.05	0.06	--	0.02	--
		12E	-1.80	-0.38	-2.10	-0.24	--		6E	0.38	0.13	--	0.03	--
		10E	-1.75	-0.07	-2.13	-0.23	--		4E	0.48	0.19	0.06	0.06	--
		2E	-1.65	-0.05	-2.10	-0.22	--		2E	0.46	0.24	0.02	0.10	--
		6E	-1.50	0.01	-2.10	-0.20	--		A	0.40	0.33	0.42	0.18	--
		4E	-1.35	0.08	-2.05	-0.16	--		B	0.52	0.43	0.44	0.22	--
		2E	-1.45	0.13	-1.90	-0.11	--		C	1.10	0.58	0.38	0.25	--
		A	-1.05	0.22	-1.82	-0.06	--		D	1.73	0.58	0.38	0.26	--
		B	-1.50	0.29	-1.88	-0.02	--		E	1.81	0.87	0.38	0.30	--
		C	-1.04	0.46	-2.06	0.02	--		F	1.11	1.11	0.56	0.40	--
		D	-0.60	0.53	-2.08	0.03	--		G	1.4	1.36	1.95	0.73	--
		E	-0.32	0.67	-2.08	0.07	--		H	1.45	1.45	11.04	1.38	--
		F	4.36	0.95	-1.92	0.16	--		I	0.60	1.26	13.30	2.06	--
		G	7.36	1.26	-1.30	0.40	--		J	--	1.00	2.80	2.11	5.90
		H	4.26	1.39	4.52	0.83	--		K	-0.22	0.70	0.50	1.54	67.40
		I	1.48	1.35	15.00	1.54	--		L	-0.28	0.99	0.18	1.25	1.10
		J	0.52	1.15	6.16	2.11	1.20		M	-0.34	0.48	0.05	1.01	--
		K	0.20	0.78	1.18	1.68	68.60		N	-0.32	0.32	-0.14	0.60	--
		L	0.08	0.65	0.56	1.42	2.80		2W	-0.38	0.17	-0.20	0.29	--
		M	0.06	0.52	0.36	1.10	0.20		4W	-0.36	0.08	-0.22	0.13	--
		N	0.04	0.35	0.14	0.66	--		6W	-0.36	0.03	-0.22	0.05	--
		2W	--	0.20	0.08	0.32	--		8W	-0.36	--	-0.25	0.02	--
		4W	--	0.11	0.06	0.17	--		10W	-0.36	--	-0.25	--	--
		6W	--	0.08	0.05	0.08	--		12W	-0.36	--	-0.26	--	--
		8W	--	0.04	0.02	0.04	--		14W	-0.36	--	-0.30	--	--
		10W	--	0.03	--	0.02	--		16W	-0.36	--	-0.30	--	--
		12W	--	0.01	--	--	--		18W	-0.36	--	-0.30	--	--
		14W	--	--	--	--	--		20W	-0.36	--	-0.28	--	--
									22W	-0.36	--	-0.26	--	--
									24W	-0.36	--	-0.26	--	--
									26W	-0.36	--	-0.26	--	--

(Continued)

(1 of 6 sheets)

Table A1 (Continued)

		Vertical Pressure, psi, at Indicated Cells									
Row	Position	Forward, Avg Speed = 1.20 mph					Reverse, Avg Speed = 2.10 mph				
		Location	P ₆	P ₇	P ₈	P ₉	Location	P ₆	P ₇	P ₈	P ₉
9	None	12E	-0.75	--	-1.50	-0.10	12E	--	0.20	--	--
		10E	-0.70	--	-1.50	-0.10	12E	--	0.30	--	--
		8E	-0.50	--	-1.50	-0.10	6E	0.25	0.30	--	--
		6E	-0.40	0.10	-1.50	--	4E	0.55	0.40	--	--
		4E	-0.25	0.10	-1.50	--	2E	0.75	0.0	--	--
		2E	-0.2	0.12	-1.50	--	A	0.40	0.4	0.30	0.10
		A	-0.40	0.24	-1.40	0.10	B	0.40	0.50	0.30	0.20
		B	-0.50	0.40	-1.50	0.20	C	1.00	0.70	0.30	0.24
		C	--	0.42	-1.50	0.24	D	1.35	0.70	0.28	0.30
		D	--	0.44	-1.50	0.26	E	2.25	0.60	0.20	0.36
		E	1.10	0.60	-1.50	0.30	F	6.10	1.00	0.24	0.50
		F	3.50	0.80	-1.60	0.40	G	7.75	1.20	0.90	0.90
		G	8.00	1.00	-1.60	0.80	H	4.10	1.30	4.30	1.70
		H	4.50	1.10	1.30	1.50	I	1.50	1.20	5.10	2.30
		I	1.90	1.00	5.70	2.20	J	0.10	1.10	0.70	2.50
		J	0.75	0.90	3.20	2.64	K	--	0.90	-0.60	1.90
		K	0.25	0.74	0.80	2.10	L	--	0.74	-0.60	1.50
		L	--	0.64	0.50	1.70	M	--	0.60	-0.60	1.20
		M	--	0.50	0.20	1.30	N	--	0.50	-0.60	0.70
		N	--	0.40	0.10	0.80	2W	--	0.40	-0.60	0.40
		2W	--	0.30	--	0.40	4W	--	0.40	-0.60	0.20
		4W	--	0.20	--	0.20	6W	--	0.36	-0.60	--
		6W	--	--	--	0.16	8W	--	0.30	-0.60	--
		8W	--	--	--	0.10	10W	--	0.28	-0.60	--
		10W	--	--	--	--	12W	--	0.24	-0.50	--
							14W	--	0.20	-0.50	--
							16W	--	0.26	-0.50	--
							18W	--	0.20	-0.50	--
							20W	--	0.10	-0.50	--
							22W	--	0.20	-0.10	--
							24W	--	0.16	-0.5	--
							26W	--	0.24	-0.5	--

		Vertical Deflection, in., at Indicated Gages									
Row	Position	Forward, Avg Speed = 1.20 mph					Reverse, Avg Speed = 2.10 mph				
		Location	D ₁	D ₂	D ₃	D ₄	Location	D ₁	D ₂	D ₃	D ₄
9	None	12E	-0.064	--	0.001	-0.002	0.003	12E	--	0.001	--
		10E	-0.064	0.001	0.001	-0.002	0.003	10E	0.004	0.001	0.001
		8E	-0.063	0.001	0.001	-0.002	0.005	8E	0.005	0.002	0.001
		6E	-0.063	0.001	0.002	-0.002	0.003	6E	0.007	0.002	0.001
		4E	-0.063	0.001	0.003	-0.001	0.003	4E	0.008	0.001	0.002
		2E	-0.063	0.001	0.003	-0.001	0.004	2E	0.009	0.002	0.001
		A	-0.061	0.003	0.003	--	0.004	A	0.014	0.003	0.003
		B	-0.056	0.004	0.002	--	0.005	B	0.024	0.005	0.002
		C	-0.038	0.007	0.003	--	0.006	C	0.043	0.007	0.003
		D	0.016	0.008	0.005	--	0.006	D	0.087	0.008	0.003
		E	--	0.008	0.006	--	0.005	E	0.106	0.008	0.006
		F	0.051	0.006	0.010	0.001	0.005	F	0.005	0.006	0.010
		G	0.027	0.004	0.013	0.002	0.005	G	-0.007	0.004	0.011
		H	0.001	0.002	0.009	0.002	0.007	H	-0.012	0.002	0.008
		I	0.004	0.001	0.005	0.003	0.009	I	-0.015	0.001	0.005
		J	0.007	--	0.003	0.003	0.013	J	-0.015	0.001	0.002
		K	0.002	--	0.001	0.007	0.014	K	-0.015	--	0.004
		L	0.001	--	0.001	0.009	0.012	L	-0.015	--	0.004
		M	0.001	--	0.001	0.001	0.010	M	-0.015	--	0.003
		N	--	--	--	--	0.006	N	-0.015	--	0.004
		2W	--	--	--	--	0.001	2W	-0.015	--	0.002
		4W	--	--	--	--	0.002	4W	-0.015	--	0.002
		6W	--	--	--	--	0.001	6W	-0.015	--	0.002
		8W	--	--	--	--	0.001	8W	-0.015	--	0.002
		10W	--	--	--	--	--	10W	-0.015	--	0.002
								12W	-0.015	--	0.002
								14W	-0.015	--	0.002
								16W	-0.015	--	0.002
								18W	-0.015	--	0.002
								20W	-0.015	--	0.002
								22W	-0.015	--	0.002
								24W	-0.015	--	0.002
								26W	-0.015	--	0.002

(Continued)

• Trace of D₁ faded and reading could not be made.

(2 of 6 sheets)

Table A16(Continued)

Vertical Pressure, psi, at Indicated Cells													
Forward, Avg Speed = 3.1 mph							Reverse, Avg Speed = 2.4 mph						
Row	Position	Location	P ₆	P ₇	P ₈	P ₉	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀
1C	1"s	12E	0.90	--	2.90	--	0	8E	0.15	0.10	--	--	--
		10E	0.96	--	2.90	0.10		6E	0.30	0.12	--	--	--
	1/2"s	8E	1.04	0.08	2.90	0.16	1/2"s	4E	0.48	0.17	0.10	0.16	--
		6E	1.18	0.08	2.90	0.18		2E	0.37	0.20	0.16	0.20	--
		4E	1.43	0.15	2.90	0.20	1"s	A	0.22	0.22	0.56	0.32	--
	0	2E	1.38	0.17	2.92	0.22		B	0.20	0.26	0.20	0.36	--
		A	1.25	0.18	3.20	0.32		C	0.40	0.42	--	0.40	3.10
		B	1.20	0.25	3.16	0.36		D	0.70	0.50	--	0.40	0.70
		C	1.39	0.37	2.90	0.40		E	1.20	0.60	--	0.40	-0.50
		D	1.57	0.40	2.90	0.40	1/2"s	F	3.00	0.79	--	0.50	-0.60
		E	2.05	0.50	2.80	0.46		G	4.10	0.90	0.16	0.90	-0.50
		F	3.50	0.70	2.74	0.60		H	2.83	1.00	1.40	1.50	-0.50
		G	4.47	0.85	2.60	0.80		I	1.30	0.91	2.50	2.30	-0.50
		H	2.45	0.95	2.80	1.32		J	0.75	0.76	1.50	2.20	-0.50
		I	1.25	0.95	3.60	1.90		K	0.45	0.55	0.95	1.70	-0.60
		J	0.35	0.80	1.90	2.20		L	0.38	0.46	0.80	1.40	-0.50
		K	0.10	0.60	0.60	1.60		M	0.30	0.35	0.70	1.10	-0.40
		L	--	0.50	0.40	1.40		N	0.25	0.28	0.70	0.70	--
		M	--	0.40	0.20	1.00		2W	0.25	0.20	0.70	0.38	--
		N	-0.05	0.25	0.10	0.64		4W	0.25	0.10	0.64	0.22	--
		2W	-0.05	0.20	--	0.40	0	6W	0.25	0.08	0.64	0.14	--
		4W	-0.05	0.10	--	0.20		8W	0.25	--	0.64	--	--
		6W	-0.05	0.07	--	0.10	1/2"s	10W	0.25	--	0.64	--	--
		8W	-0.05	--	--	--		12W	0.25	--	0.64	--	--
		10W	-0.05	--	--	--	1"s	14W	0.25	--	0.64	--	--
	1/2"W	12W	-0.05	--	--	--		16W	0.25	--	0.64	--	--
		14W	-0.05	--	--	--		18W	0.25	--	0.64	--	--
		16W	-0.05	--	--	--		20W	0.25	--	0.64	--	--
		18W	-0.05	--	--	--		22W	0.25	--	0.64	--	--
		20W	-0.05	--	--	--		24W	0.25	--	0.64	--	--
	1"W	22W	-0.05	--	--	--		26W	0.25	--	0.64	--	--
		24W	--	--	--	--							

Vertical Deflection, in., at Indicated Cells													
Forward, Avg Speed = 3.1 mph							Reverse, Avg Speed = 2.4 mph						
Row	Position	Location	D ₁	D ₂	D ₃	D ₄	Position	Location	D ₁	D ₂	D ₃	D ₄	D ₅
1D	1"s	12E	0.027	-0.002	-0.004	-0.002	0	10E	0.001	0.001	0.001	--	--
		10E	0.027	-0.001	-0.004	-0.002		8E	0.004	0.001	0.002	--	--
	1/2"s	8E	0.030	--	-0.003	-0.002	1/2"s	6E	0.001	0.001	0.002	--	--
		6E	0.025	--	-0.002	-0.002		4E	--	0.002	0.004	--	--
		4E	0.025	--	-0.001	-0.002	1"s	2E	--	0.002	0.003	--	--
	0	2E	0.025	0.001	-0.001	-0.001		A	0.003	0.004	0.003	--	0.001
		A	0.025	0.002	-0.002	-0.001		B	0.009	0.006	0.004	0.001	0.003
		B	0.030	0.005	-0.002	-0.001		C	0.018	0.012	0.006	0.004	0.006
		C	0.033	0.010	--	-0.001		D	0.021	0.013	0.008	0.001	0.002
		D	0.034	0.013	0.002	--	1/2"s	E	0.025	0.013	0.012	0.001	-0.002
		E	0.032	0.014	0.005	--		F	0.018	0.008	0.005	0.002	-0.002
		F	0.021	0.011	0.016	--		G	0.012	0.004	0.031	0.004	-0.002
		G	0.012	0.007	0.031	0.002		H	0.007	0.001	0.015	0.006	0.002
		H	0.005	0.004	0.023	0.004		I	0.005	--	0.004	0.006	0.010
		I	0.003	0.002	0.011	0.005		J	0.004	-0.001	0.001	0.005	0.020
		J	0.002	0.001	0.005	0.004		K	0.004	-0.002	-0.001	0.003	0.025
		K	0.001	0.004	0.003	0.003		L	0.004	-0.002	-0.001	0.002	0.020
		L	--	--	0.002	0.003		M	0.004	-0.002	-0.002	0.001	0.014
		M	--	--	0.001	0.002		N	0.004	-0.002	-0.002	0.001	0.007
		N	--	--	--	--		2W	0.004	-0.002	-0.002	--	0.002
		2W	--	--	--	--	0	4W	0.004	-0.002	-0.002	--	-0.001
		4W	--	--	--	--		6W	0.004	-0.002	-0.002	--	-0.002
		6W	--	--	--	--	1/2"s	8W	0.004	-0.002	-0.002	--	-0.002
		8W	--	--	--	--		10W	0.004	-0.002	-0.002	--	-0.002
		10W	--	--	--	--	1"s	12W	0.004	-0.002	-0.002	--	-0.002
								14W	0.004	-0.002	-0.002	--	-0.002
								16W	0.004	-0.002	-0.002	--	-0.002
								18W	0.004	-0.002	-0.002	--	-0.002
								20W	0.004	-0.002	-0.002	--	-0.002
								22W	0.004	-0.002	-0.002	--	-0.002
								24W	0.004	-0.002	-0.002	--	-0.002
								26W	0.004	-0.002	-0.002	--	-0.002

(Continued)

(3 of 6 sheets)

Table A14(Continued)

		Vertical Pressure, psi, at Indicated Cell												Reverse, Avg Speed = 2.7 mm											
		Forward, Avg Speed = 3.2 mm																							
Row	Position	Location	6	7	8	9	10	Position	Location	6	7	8	9	10	Position	Location	6	7	8	9	10				
11	0	12E	0.50	--	0.50	0.24	0.75	1"S	12E	--	0.05	--	--	--	0	12E	--	0.05	--	--	--	--			
	1/2"S	10E	0.50	0.12	0.50	0.24	0.75	1/2"E	10E	0.10	0.10	--	--	--	0	10E	0.12	0.15	--	--	--				
		8E	0.55	0.13	0.50	0.24	0.75		6E	8E	0.23	0.18	--	--		--	6E	8E	0.23	0.18	--	--	--		
		6E	0.70	0.11	0.48	0.30	0.75			4E	6E	0.30	0.25	--		0.10		--	4E	6E	0.30	0.25	--	0.10	--
		4E	0.80	0.20	0.50	0.32	0.75				2E	4E	0.22	0.25		0.10		0.16		--	2E	4E	0.22	0.25	0.10
	1"	A	0.70	0.30	0.62	0.40	0.75	1/2"S				A	0.10	0.32	0.20	0.20		--		A		0.10	0.32	0.20	0.20
		B	0.74	0.28	0.60	0.44	0.75		1"			B	--	0.35	0.10	0.24	--	B				--	0.35	0.10	0.24
		C	0.80	0.35	0.50	0.50	0.60			1/2"E		C	0.20	0.50	--	0.20	--		C			0.20	0.50	--	0.20
		D	0.90	0.50	0.48	0.56	0.60				1"	D	0.25	0.60	-0.10	0.22	--				D	0.25	0.60	-0.10	0.22
	E	1.05	0.58	0.40	0.60	0.50	1/2"S	E				0.50	0.65	-0.16	0.30	--	E			0.50		0.65	-0.16	0.30	--
	F	1.43	0.68	0.40	0.60	0.50		1"	F			1.05	0.85	-0.16	0.42	--		F		1.05		0.85	-0.16	0.42	--
	O	1.45	0.76	0.46	0.80	0.50			1/2"E	O		1.37	0.95	--	0.70	--			O	1.37		0.95	--	0.70	--
	H	1.05	0.90	0.56	1.08	0.50				1"	H	1.05	0.95	0.20	1.00	--				H	1.05	0.95	0.20	1.00	--
	I	0.58	0.88	0.62	1.30	0.50	1/2"S				I	0.65	0.95	0.56	1.15	--	I				0.65	0.95	0.56	1.15	--
	1/2"E	J	0.24	0.70	0.42	1.32		0.25			1/2"E	J	0.35	0.80	0.52	1.18		--			J	0.35	0.80	0.52	1.18
		K	0.10	0.50	0.20	1.10		--	1"			K	0.21	0.55	0.30	1.10		--	K			0.21	0.55	0.30	1.10
		L	0.08	0.50	0.16	0.95		--		1/2"S		L	0.18	0.50	0.24	0.90		--		L		0.18	0.50	0.24	0.90
		M	0.05	0.45	0.10	0.80	--	1"				M	0.15	0.45	0.20	0.80	--	M				0.15	0.45	0.20	0.80
	1/2"E	N	--	0.30	--	0.60	--				1/2"E	N	0.10	0.35	0.10	0.60	--				N	0.10	0.35	0.10	0.60
		1"E	2W	--	0.20	--	0.30		--			1/2"S	2W	0.05	0.25	0.10	0.30		--			2W	0.05	0.25	0.10
			4W	--	0.15	--	0.20		--	1"			4W	--	0.15	0.10	0.24		--	4W			--	0.15	0.10
			6W	--	0.10	--	0.10	--	1/2"E				6W	--	0.10	0.10	0.20	--	6W				--	0.10	0.10
	8W		--	0.10	--	--	--	1/2"S			8W		--	0.10	0.10	0.14	--	8W			--		0.10	0.10	0.14
	1"	10W	--	--	--	--	--				1"	10W	--	0.08	0.10	0.10	--				10W	--	0.08	0.10	0.10
		1/2"E	12W	--	--	--	--			--		1/2"E	12W	--	0.05	0.10	0.10			--		12W	--	0.05	0.10
			14W	--	--	--	--		--	1"			14W	--	0.05	0.10	0.10		--	14W			--	0.05	0.10
			16W	--	--	--	--	--	1/2"S				16W	--	--	0.10	0.10	--	16W				--	--	0.10
	18W		--	--	--	--	--	1"			18W		--	--	0.10	0.10	--	18W			--		--	0.10	0.10
	1/2"E	20W	--	--	--	--	--				1/2"E	20W	--	--	0.10	0.10	--				20W	--	--	0.10	0.10
		22W	--	--	--	--	--			1"		22W	--	--	0.10	0.10	--			22W		--	--	0.10	0.10
		24W	--	--	--	--	--		1/2"S			24W	--	--	0.10	0.10	--		24W			--	--	0.10	0.10
		26W	--	--	--	--	--	1"				26W	--	--	0.10	0.10	--	26W				--	--	0.10	0.10

Vertical Deflection, in., at Indicated Cell

Forward, Avg Speed = 3.2 mm

Reverse, Avg Speed = 2.7 mm

Position	Location	1	2	3	4	5	Position	Location	1	2	3	4	5
0	12E	0.005	-0.003	-0.010	-0.002	-0.043	1/2"S	10E	0.001	--	--	--	--
1/2"S	10E	0.005	-0.003	-0.010	-0.002	-0.043	1/2"S	8E	0.002	--	--	--	--
1"	8E	0.006	-0.002	-0.010	-0.002	-0.042	1"	6E	0.001	--	--	--	--
1/2"S	6E	0.006	-0.002	-0.009	-0.002	-0.042	1/2"S	4E	--	0.002	--	--	--
1"	4E	0.006	-0.001	-0.008	-0.002	-0.042	1"	2E	0.001	0.002	0.002	--	--
1/2"S	2E	0.006	--	-0.008	-0.002	-0.041	1/2"S	A	0.002	0.005	0.002	--	0.001
1"	A	0.007	0.001	-0.008	-0.002	-0.040	1"	S	0.004	0.010	0.005	--	0.002
1/2"S	B	0.008	0.005	-0.008	-0.001	-0.039	1/2"S	C	0.007	0.015	0.007	--	0.004
1"	C	0.010	0.011	-0.006	--	-0.039	1"	D	0.009	0.015	0.010	--	0.004
1/2"S	D	0.011	0.016	-0.005	--	-0.038	1/2"S	E	0.010	0.014	0.017	--	0.004
1"	E	0.011	0.018	-0.002	--	-0.040	1"	F	0.008	0.009	0.034	0.002	0.005
1/2"S	F	0.008	0.014	0.016	0.001	-0.039	1/2"S	G	0.005	0.004	0.042	0.004	0.006
1"	O	0.005	0.008	0.043	0.002	-0.038	1"	H	0.003	--	0.015	0.006	0.010
1/2"S	H	0.003	0.004	0.034	0.004	-0.036	1/2"S	I	0.002	--	0.002	0.006	0.004
1"	I	0.002	0.002	0.014	0.005	-0.030	1"	J	0.001	-0.002	-0.003	0.005	0.003
1/2"S	J	0.001	--	0.007	0.004	-0.010	1/2"S	K	--	-0.002	-0.004	0.003	0.003
1"	K	--	--	0.004	0.003	0.071	1"	L	--	-0.003	-0.005	0.002	0.001
1/2"S	L	--	--	0.003	0.002	0.051	1/2"S	M	--	-0.003	-0.006	0.001	--
1"	M	--	--	0.002	0.001	0.031	1"	N	--	-0.003	-0.006	--	-0.008
1/2"S	N	--	--	--	--	0.014	1/2"S	2W	--	-0.003	-0.006	--	-0.013
1"	2W	--	--	--	--	0.007	1"	4W	--	-0.003	-0.007	--	-0.016
1/2"S	4W	--	--	--	--	0.003	1/2"S	6W	--	-0.003	-0.007	--	-0.017
1"	6W	--	--	--	--	--	1"	8W	--	-0.003	-0.007	--	-0.017
1/2"S							1/2"S	10W	--	-0.003	-0.007	--	-0.017
1"							1"	12W	--	-0.003	-0.007	--	-0.017
1/2"S							1/2"S	14W	--	-0.003	-0.007	--	-0.017
1"							1"	16W	--	-0.003	-0.007	--	-0.017
1/2"S							1/2"S	18W	--	-0.003	-0.007	--	-0.017
1"							1"	20W	--	-0.003	-0.007	--	-0.017
1/2"S							1/2"S	22W	--	-0.003	-0.007	--	-0.017
1"							1"	24W	--	-0.003	-0.007	--	-0.017
1/2"S							1/2"S	26W	--	--	-0.007	--	-0.017

Table A14(Continued)

Vertical Pressure, psi, at Indicated Cells														
Forward, Avg Speed = 2.20 mph								Reverse, Avg Speed = 1.77 mph						
Row	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀
13	1"W	8E	0.02	0.03	--	--	*	1"S	10E	0.05	--	--	--	*
		6E	0.10	0.08	--	--			8E	0.08	0.08	--	--	
	1/2"W	4E	0.12	0.08	--	0.05		1/2"S	6E	0.10	0.08	--	--	
		2E	0.16	0.15	--	0.10			4E	0.15	0.11	--	0.05	
	0	A	0.14	0.16	--	0.15		1"S	2E	0.15	0.12	--	0.09	
		B	0.15	0.21	--	0.20			A	0.05	0.20	--	0.10	
	1/2"W	C	0.20	0.28	--	0.20			B	0.05	0.28	--	0.15	
		D	0.22	0.40	--	0.20			C	0.10	0.35	--	0.15	
	1"W	E	0.30	0.46	--	0.20			D	0.12	0.40	--	0.15	
		F	0.38	0.58	--	0.31			E	0.20	0.48	--	0.20	
		G	0.35	0.62	0.04	0.45			F	0.35	0.63	--	0.27	
		H	0.30	0.65	0.10	0.61			G	0.40	0.68	--	0.35	
		I	0.15	0.60	0.18	0.71			H	0.40	0.68	0.10	0.59	
		J	0.05	0.52	0.12	0.70		1/2"S	I	0.27	0.70	0.20	0.70	
		K	0.01	0.37	0.04	0.51			J	0.20	0.65	0.20	0.77	
		L	0.01	0.30	0.02	0.40		0	K	0.10	0.55	0.10	0.69	
		M	--	0.20	--	0.35			L	0.08	0.45	0.04	0.60	
		N	--	0.13	--	0.20			M	0.04	0.35	0.04	0.50	
		2W	--	0.10	--	0.05			N	--	0.27	--	0.35	
		4W	--	0.05	--	--			2W	--	0.15	--	0.20	
		6W	--	--	--	--			4W	--	0.12	--	0.15	
									6W	--	0.08	--	0.08	
									8W	--	--	--	0.02	
								1/2"S	10W	--	--	--	--	

Vertical Deflection, in., at Indicated Gages

Forward, Avg Speed = 2.20 mph

Reverse, Avg Speed = 1.77 mph

Position	Location	D ₆	D ₇	D ₈	D ₉	
13	1"W	24E	-0.002	-0.001	--	0.009
		22E	-0.002	-0.001	--	0.009
		20E	-0.002	-0.001	--	0.009
		18E	-0.002	-0.001	--	0.009
		16E	-0.002	-0.001	--	0.009
		14E	-0.002	-0.001	--	0.009
		12E	-0.001	-0.001	--	0.009
		10E	-0.001	-0.001	--	0.009
		8E	-0.001	-0.001	--	0.009
		6E	-0.000	-0.001	--	0.009
1/2"W	4E	--	-0.001	--	0.009	
	2E	--	--	--	0.009	
0	A	0.002	-0.001	--	0.009	
	B	0.005	-0.000	--	0.010	
1/2"W	C	0.011	0.001	0.000	0.014	
	D	0.014	0.003	0.001	0.013	
	E	0.015	0.006	0.001	0.012	
	F	0.011	0.019	0.001	0.011	
	G	0.007	0.031	0.003	0.011	
	H	0.003	0.021	0.005	0.014	
	I	0.001	0.010	0.005	0.019	
	J	0.001	0.005	0.004	0.028	
	K	0.000	0.003	0.003	0.027	
	L	--	0.002	0.002	0.022	
	M	--	0.001	0.002	0.017	
	N	--	0.001	0.001	0.009	
	2W	--	0.001	0.000	0.004	
	4W	--	0.001	--	0.003	
	6W	--	--	--	0.002	
	8W	--	--	--	0.001	
	10W	--	--	--	0.001	
	12W	--	--	--	0.000	
	14W	--	--	--	--	

Position	Location	D ₆	D ₇	D ₈	D ₉	
13	1"S	16E	0.001	--	--	--
		14E	0.001	--	--	--
		12E	0.001	--	--	0.001
		10E	0.002	--	--	0.001
		8E	0.002	--	--	0.001
	1-1/2"S	6E	0.002	0.000	--	0.001
		4E	0.002	0.001	--	0.001
		2E	0.003	0.001	--	0.001
	1"S	A	0.005	0.002	0.000	0.003
		B	0.009	0.003	0.001	0.005
	C	0.014	0.006	0.001	0.008	
	D	0.015	0.002	0.001	0.011	
	E	0.015	--	0.001	0.015	
	F	0.010	-0.001	0.001	0.011	
	G	0.005	0.001	0.004	0.015	
1/2"S	H	0.002	0.003	0.005	0.019	
	I	0.001	0.009	0.005	0.008	
	J	0.000	0.018	0.004	0.004	
0	K	--	0.021	0.002	0.001	
	L	--	0.017	0.002	0.001	
	M	--	0.013	0.001	--	
	N	--	0.007	0.000	--	
	2W	--	0.003	--	--	
	4W	--	0.001	--	--	
	6W	--	--	--	--	

(Continued)

* Not working.

(3 of 6 sheets)

Table A16 (Concluded)

Forward, Avg Speed = 0.35 mph										Reverse, Avg Speed = 1.17 mph				
Row	Position	Location	6	7	8	9	10	Position	Location	6	7	8	9	10
15	O	8E	--	0.02	--	--	--	O	12E	--	0.07	--	--	--
		6E	0.01	0.06	--	--	--		10E	--	0.05	--	--	--
	1/2" N	4E	0.01	0.08	--	--	--		8E	--	0.08	--	--	--
	1" N	2E	0.02	0.10	--	0.05	--	1/2" N	6E	0.05	0.08	--	--	--
		A	0.03	0.10	--	0.09	--		4E	0.08	0.11	--	0.05	--
		B	0.04	0.15	--	0.10	--	1" N	2E	0.08	0.15	--	0.06	--
		C	0.07	0.20	--	0.12	--		A	0.05	0.15	--	0.10	--
	1/2" N	D	0.08	0.22	--	0.15	--		B	0.03	0.15	--	0.10	--
		E	0.10	0.40	--	0.20	--		C	0.04	0.20	--	0.10	--
		F	0.10	0.31	--	0.20	--		D	0.05	0.21	--	0.12	--
		O	0.12	0.38	--	0.27	--		E	0.05	0.27	--	0.12	--
		H	0.11	0.41	0.10	0.35	--	1/2" N	F	0.10	0.31	--	0.15	--
		I	0.12	0.40	0.10	0.45	--		O	0.12	0.38	--	0.22	--
		J	0.08	0.35	0.10	0.40	--	O	H	0.12	0.38	--	0.32	--
		K	0.06	0.28	0.10	0.40	--		I	0.10	0.45	0.04	0.40	--
		L	0.06	0.22	0.08	0.35	--		J	0.05	0.37	0.04	0.46	--
		M	0.07	0.20	0.04	0.27	--	1/2" S	K	0.02	0.30	0.02	0.40	--
		N	0.02	0.10	--	0.20	--		L	0.01	0.30	0.01	0.38	--
		2W	--	0.10	--	0.10	--		M	--	0.22	--	0.32	--
		4W	--	--	--	0.05	--		N	--	0.17	--	0.27	--
		6W	--	--	--	0.03	--		2W	--	0.15	--	0.18	--
		8W	--	--	--	--	--		4W	--	0.10	--	0.10	--
									6W	--	0.08	--	0.05	--
									8W	--	0.05	--	--	--
									10W	--	--	--	--	--

Vertical Deflection, in., at Indicated Gages

Forward, Avg Speed = 2.5 mph

Reverse, Avg Speed = 1.71 mph

Position	Location	D ₆	D ₇	D ₈	D ₉	Position	Location	D ₆	D ₇	D ₈	D ₉
1's ↓	24E	--	-0.002	--	-0.030	1/2" N ↓	10E	--	0.001	--	--
	22E	--	-0.002	--	-0.030		8E	--	0.002	--	--
	20E	--	-0.002	--	-0.030		6E	0.001	0.002	--	--
	18E	--	-0.002	--	-0.030		4E	0.002	0.003	--	--
	16E	--	-0.002	--	-0.030		2E	0.002	0.004	--	--
	14E	--	-0.002	--	-0.030		A	0.002	0.005	--	0.002
1/2" S ↓	12E	--	-0.002	--	-0.030	1/2" N ↓	B	0.005	0.006	--	0.002
	10E	0.001	-0.002	--	-0.030		C	0.010	0.008	0.001	0.002
	8E	0.001	-0.002	--	-0.030		D	0.016	0.013	0.002	0.003
1" N ↓	6E	0.001	-0.001	--	-0.030		E	0.018	0.018	0.002	0.003
	4E	0.001	-0.000	--	-0.030		F	0.017	0.038	0.002	0.003
	2E	0.002	-0.000	--	-0.030		O	0.011	0.046	0.004	0.005
1/2" N ↓	A	0.003	-0.001	--	-0.030		H	0.004	0.025	0.006	0.008
	B	0.007	-0.001	--	-0.028		I	0.002	0.008	0.006	0.017
	C	0.014	--	--	-0.026		J	--	0.003	0.005	0.027
1/2" N ↓	J	0.017	0.002	0.001	-0.025	1/2" S ↓	K	--	--	0.003	0.068
	K	0.020	0.004	0.002	-0.026		L	--	--	0.002	0.042
	F	0.016	0.020	0.002	-0.027		M	--	--	0.001	0.010
O ↓	O	0.010	0.046	0.003	-0.026		N	--	--	0.001	-0.002
	N	0.004	0.034	0.005	-0.024		2W	--	--	0.000	-0.006
	I	0.002	0.016	0.006	-0.020	O ↓	4W	--	--	--	-0.010
O ↓	J	0.002	0.006	0.005	-0.012		6W	--	--	--	-0.012
	K	0.001	0.004	0.004	0.055		8W	--	--	--	-0.013
	L	--	0.003	0.003	0.054		10W	--	--	--	-0.013
O ↓	M	--	0.002	0.002	0.033		12W	--	--	--	-0.013
	N	--	--	0.000	0.015		14W	--	--	--	-0.013
	2W	--	--	0.000	0.007		16W	--	--	--	-0.013
O ↓	4W	--	--	--	0.003		18W	--	--	--	-0.013
	6W	--	--	--	0.001		20W	--	--	--	-0.014
	8W	--	--	--	--		22W	--	--	--	-0.014
							24W	--	--	--	-0.014
							26W	--	--	--	--

• Not working.

(6 of 6 sheets)

Table A-17

Multiple-Wheel Heavy Gear Load Flexible Pavement Test, Dynamic Instrumentation Loading Data
 Item 4; Load Condition: 30 kips, Single Wheel, 100 psi

Vertical Pressure, P_v , at Indicated Cells														
Forward, Avg Speed = 3.58 mph							Reverse, Avg Speed = 3.34 mph							
Row	Position	Location	P_1	P_2	P_3	P_4	Position	Location	P_1	P_2	P_3	P_4	P_5	
5	0	12E	--	-0.30	-3.20	-0.19	-1.80	1"8	12E	--	0.10	--	--	--
		10E	--	-0.26	-3.28	-0.15	-1.80		10E	--	0.17	--	--	--
		8E	--	-0.20	-3.16	-0.10	-1.80		8E	--	0.20	--	0.04	--
		6E	--	-0.11	-3.08	-0.05	-1.74		6E	--	0.30	0.20	0.10	--
		4E	--	-0.05	-3.70	--	-1.66		4E	--	0.37	0.40	0.11	--
		2E	--	--	-3.00	0.05	-1.47		2E	--	0.39	0.36	0.17	0.15
		A	--	0.18	-3.08	0.15	-1.41		A	--	0.56	0.20	0.22	0.30
		B	--	0.49	-3.08	0.25	-1.50		B	--	0.99	0.32	0.32	0.30
		C	--	1.07	-3.00	0.38	-1.53		C	--	1.50	0.40	0.47	0.24
		D	17.00	1.55	-2.88	0.50	-1.56		D	--	1.99	0.64	0.56	0.21
		E	28.10	2.00	-2.40	0.62	-1.50		E	38.75	2.35	1.24	0.69	0.24
		F	--	2.58	4.32	0.93	-1.14		F	--	2.81	7.20	1.02	0.63
		G	--	2.25	19.24	1.25	-0.21		G	--	2.30	20.40	1.34	1.83
		H	--	1.40	8.80	1.40	3.57		H	--	1.41	8.00	1.42	4.66
		I	--	0.79	2.00	1.38	7.56		I	--	0.85	0.48	1.32	7.95
		J	--	0.31	0.80	1.02	5.22		J	--	0.41	-0.40	1.00	4.47
		K	--	0.20	0.40	0.79	2.10		K	--	0.24	-0.80	0.69	1.23
		L	--	0.08	0.28	0.59	1.05		L	--	0.20	-0.80	0.59	0.72
		M	--	0.05	0.28	0.49	0.60		M	--	0.10	-0.88	0.42	0.12
		N	--	0.02	0.20	0.28	0.15		N	--	--	-1.00	0.22	-0.24
2W	--	--	0.20	0.15	--	2W	--	--	-1.00	0.04	-0.45			
4W	--	--	0.20	0.10	--	4W	--	--	-1.00	-0.02	-0.54			
6W	--	--	0.20	0.05	--	6W	--	--	-1.00	-0.07	-0.54			
8W	--	--	0.20	--	--	8W	--	--	-1.00	-0.09	-0.54			
10W	--	--	0.20	--	--	10W	--	--	-1.00	-0.10	-0.54			
12W	--	--	0.20	--	--	12W	--	--	-1.00	-0.10	-0.54			
14W	--	--	--	--	--	14W	--	--	--	--	--			

(Continued)

(1 of 6 sheets)

Table A17(Continued)

Vertical Pressure, psi, at Indicated Cells														
Forward, Avg Speed = 1.06 mph							Reverse, Avg Speed = 2.04 mph							
Run	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀
9	None	20E	--	-0.58	-1.95	-0.07	-0.62	1" W	20E	--	0.04	--	--	0.09
		18E	--	-0.58	-1.95	-0.06	-0.64	1/2" W	18E	--	0.04	--	--	0.14
		16E	--	-0.58	-1.95	-0.06	-0.62	0	16E	--	0.04	--	--	0.15
		14E	--	-0.56	-2.00	-0.06	-0.62	↓	14E	--	0.06	--	--	0.13
		12E	--	-0.52	-1.95	-0.07	-0.62	1/2" W	12E	--	0.10	--	0.06	0.10
		10E	--	-0.39	-1.95	--	-0.59	1" W	10E	--	0.12	--	0.09	0.09
		8E	--	-0.28	-1.90	--	-0.58	↓	8E	--	0.28	--	0.11	0.11
		6E	--	-0.22	-1.85	0.05	-0.55	1/2" W	6E	--	0.34	--	0.16	0.13
		4E	--	-0.20	-1.85	0.10	-0.50	0	4E	--	0.40	--	0.20	0.16
		2E	--	-0.10	-1.90	0.13	-0.47	↓	2E	--	0.50	--	0.28	0.21
		A	--	--	-1.90	0.17	-0.39	1" W	A	--	0.72	--	0.31	0.35
		B	--	0.40	-1.85	0.24	-0.35	↓	B	--	1.26	0.10	0.43	0.37
		C	--	1.04	-1.85	0.37	-0.40	1/2" W	C	3.40	2.44	0.20	0.56	0.35
		D	32.40	1.70	-1.85	0.49	-0.43	0	D	78.50	2.80	0.75	0.67	0.36
		E	107.60	2.42	0.10	0.57	-0.43	↓	E	74.20	3.36	1.60	0.83	0.45
		F	0.80	3.16	5.25	0.87	-0.35	1" W	F	--	3.26	4.50	1.12	0.77
		U	0.70	2.78	3.10	1.16	--	↓	U	--	2.20	4.60	1.35	1.73
		N	0.60	1.72	0.70	1.30	1.62	1/2" W	N	--	1.40	0.45	1.40	4.29
		I	0.50	0.78	--	1.29	5.45	0	I	--	0.68	-0.60	1.26	5.71
		J	0.40	0.38	--	1.08	4.51	↓	J	--	0.22	-0.60	0.91	2.97
		K	0.30	--	--	0.75	2.08	1" W	K	--	0.08	-0.55	0.69	1.14
		L	0.10	--	--	0.60	0.97	↓	L	--	--	-0.55	0.53	0.57
		M	0.00	--	--	0.48	0.55	1/2" W	M	--	-0.10	-0.55	0.40	0.33
		2W	--	--	-0.20	0.26	0.20	0	2W	--	-0.20	-0.55	0.20	0.11
		4W	--	--	--	0.17	0.13	↓	4W	--	-0.20	-0.55	0.12	-0.07
		6W	--	0.10	-0.25	0.08	0.10	1/2" W	6W	--	-0.20	-0.55	--	-0.07
		8W	--	0.10	-0.25	0.03	0.08	0	8W	--	-0.20	-0.55	--	-0.07
		10W	--	0.12	-0.25	--	0.07	1" W	10W	--	-0.20	-0.55	--	-0.07
		12W	--	0.08	-0.25	--	0.10	↓	12W	--	-0.20	-0.55	--	-0.07
		14W	--	0.06	-0.25	--	0.06	0	14W	--	-0.20	-0.55	--	-0.07
		16W	--	--	--	--	--	↓	16W	--	--	--	--	--

Vertical Deflection, in., at Indicated Gages

Forward, Avg Speed = 1.06 mph

Reverse, Avg Speed = 2.14 mph

Position	Location	D ₁	D ₂	D ₃	D ₄	D ₅	Position	Location	D ₁	D ₂	D ₃	D ₄	D ₅	
9	None	20E	-0.005	0.005	--	0.002	--	1" W	20E	--	--	-0.001	--	-0.001
		18E	-0.005	0.006	--	0.002	--	1/2" W	18E	--	--	-0.002	--	-0.002
		16E	-0.005	0.006	--	0.002	--	0	16E	--	0.001	-0.002	--	-0.003
		14E	-0.005	0.006	--	0.002	--	↓	14E	--	0.001	-0.002	--	-0.003
		12E	-0.005	0.006	--	0.002	--	1/2" W	12E	--	0.002	-0.002	--	-0.004
		10E	-0.005	0.007	--	0.002	--	1" W	10E	--	0.002	-0.001	--	-0.003
		8E	-0.005	0.009	--	0.002	--	↓	8E	--	0.005	--	--	--
		6E	-0.005	0.008	--	0.002	--	1/2" W	6E	--	0.002	--	0.001	-0.001
		4E	-0.005	0.001	--	0.003	--	0	4E	--	0.001	--	0.001	-0.001
		2E	-0.005	0.005	--	0.004	--	↓	2E	0.020	0.002	--	0.003	-0.001
		A	-0.005	0.010	--	0.004	--	1" W	A	0.002	0.005	--	0.003	--
		B	-0.004	0.013	--	0.004	0.001	↓	B	0.003	0.011	--	0.002	--
		C	-0.002	0.015	0.001	0.004	0.002	1/2" W	C	0.005	0.017	-0.001	0.001	-0.001
		D	-0.003	0.019	0.001	0.004	0.002	0	D	0.005	0.018	-0.001	0.002	-0.001
		E	-0.005	0.021	0.001	0.005	0.002	↓	E	0.006	0.019	-0.001	0.003	-0.002
		F	-0.003	0.016	0.001	0.007	0.001	1" W	F	0.008	0.014	-0.001	0.006	-0.002
		G	-0.003	0.010	--	0.010	0.001	↓	G	0.011	0.008	-0.001	0.012	--
		H	-0.000	0.005	--	0.016	0.002	1/2" W	H	0.015	0.004	--	0.015	0.005
		I	-0.073	0.003	--	0.021	0.005	0	I	0.094	0.002	--	0.021	0.011
		J	-0.058	0.001	-0.001	0.019	0.010	↓	J	0.068	0.001	--	0.015	0.016
		K	0.009	0.001	-0.001	0.013	0.014	1" W	K	0.110	0.001	--	0.009	0.017
		L	0.099	--	-0.001	0.008	0.012	↓	L	0.095	0.001	--	0.006	0.015
		M	0.057	--	-0.001	0.006	0.010	1/2" W	M	0.001	0.001	--	0.004	0.011
		N	0.025	--	-0.001	0.003	0.005	0	N	-0.011	0.001	--	0.002	0.006
		2W	0.012	--	-0.001	0.002	0.002	↓	2W	-0.019	0.001	--	--	0.003
		4W	0.005	--	-0.001	0.001	--	1" W	4W	-0.021	0.002	--	--	0.001
		6W	0.002	--	-0.001	--	-0.001	↓	6W	-0.022	0.002	--	--	--
		8W	0.001	--	-0.001	--	-0.001	1/2" W	8W	-0.021	0.002	--	--	--
		10W	0.001	--	-0.001	--	-0.001	0	10W	-0.021	0.002	--	--	--
		12W	--	--	--	--	-0.001	↓	12W	-0.020	0.002	--	--	--
		14W	--	--	--	--	-0.001	1" W	14W	-0.021	0.002	--	--	--
		16W	--	--	--	--	--	↓	16W	--	--	--	--	--

(Continued)

(2 of 6 sheets)

Table A17(Continued)

Vertical Pressure, psi, at Indicated Cells														
Forward, Avg Speed = 3.25 mph							Reverse, Avg Speed = 2.51 mph							
Row	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀
10	1"s	20E	1.00	--	5.10	--	2.61	0	20E	0.20	--	-0.35	--	--
		18E	1.00	0.18	5.00	--	2.60		18E	0.20	--	0.30	--	--
	1/2"s	16E	1.00	0.30	5.00	--	2.58		16E	0.20	--	0.35	0.05	--
		14E	1.00	0.40	5.00	--	2.56		14E	0.20	0.16	0.35	0.05	0.04
	0	12E	1.00	0.62	5.00	--	2.52		12E	0.20	0.25	0.40	0.07	--
		10E	1.00	0.84	5.00	--	2.54		10E	0.20	0.72	0.40	0.12	--
		8E	8.40	1.20	5.20	0.09	2.60		8E	70.60	0.94	0.70	0.18	0.04
	1/2"s	6E	2.35	1.46	5.30	0.12	2.62		6E	-1.00	1.10	0.90	0.26	0.05
		4E	2.60	1.62	6.00	0.24	2.76		4E	-1.00	1.38	1.70	0.38	0.28
	1"s	2E	2.80	1.78	5.65	0.32	3.10		2E	-1.00	1.60	0.40	0.45	0.62
		A	2.80	2.46	5.60	0.45	3.52		A	-1.00	2.64	0.35	0.62	1.12
		B	1.00	4.02	5.50	0.66	3.56		B	-1.00	4.50	0.40	0.77	1.00
		C	-1.90	6.22	6.00	0.86	3.22		C	-1.00	7.72	1.30	1.11	0.60
		D	-1.50	7.80	6.20	1.05	3.24		D	-1.00	9.04	2.10	1.26	0.60
		E	-1.50	9.45	6.70	1.20	3.30	1/2"s	E	-1.00	10.40	3.40	1.50	0.64
		F	-0.90	11.08	8.00	1.66	3.83	1"s	F	-1.00	10.54	7.35	2.03	1.60
		G	0.60	9.20	7.50	2.15	5.22		G	-1.00	8.02	6.90	2.42	3.80
		H	1.00	6.02	3.70	2.50	9.08		H	-1.00	5.20	2.95	2.53	9.14
		I	1.00	3.14	1.00	2.37	13.82		I	-1.00	2.94	2.40	2.25	12.54
		J	1.00	1.60	0.40	1.99	10.32		J	-1.00	1.60	2.40	1.77	8.94
		K	1.00	0.76	--	1.37	4.60		K	-1.00	0.72	2.40	1.26	4.66
		L	0.50	0.46	--	1.16	2.38		L	-1.00	0.54	2.40	1.03	4.36
		M	0.50	0.22	--	0.95	1.70		M	-1.00	0.38	2.40	0.82	2.49
		N	0.50	--	--	0.53	0.46	0	N	-1.00	--	2.40	0.51	1.40
		2W	0.50	--	--	0.32	0.12	1"s	2W	-1.00	--	2.40	0.30	0.97
		4W	--	--	--	0.18	--		4W	-1.00	--	2.40	0.14	0.80
		6W	--	--	--	0.08	--		6W	-1.00	--	2.40	0.09	0.80
		8W	--	--	--	--	--	1/2"s	8W	-1.00	--	2.40	--	0.80
									10W	-1.00	--	2.40	--	0.80
									12W	-1.00	--	2.40	--	0.80
									14W	-1.00	--	2.40	--	0.80
									16W	--	--	--	--	--

Vertical Deflection, in., at Indicated Gages															
Forward, Avg Speed = 3.25							Reverse, Avg Speed = 2.51 mph								
Position	Location	D ₁	D ₂	D ₃	D ₄	D ₅	Position	Location	D ₁	D ₂	D ₃	D ₄	D ₅		
10	1"S	20E	0.025	0.007	-0.002	-0.009	-0.007	0 ↓ 1/2"N 1"N ↓ 0 ↓ 1"S ↓ 0 ↓ 1/2"S	20E	-0.001	0.001	--	--	--	
	18E	0.025	0.008	-0.002	-0.009	-0.007	18E		--	0.001	--	--	--	--	
	1/2"S	16E	0.025	0.008	-0.002	-0.009	-0.007		16E	--	0.002	--	--	--	--
	14E	0.025	0.008	-0.002	-0.009	-0.007	14E		--	0.003	--	--	--	--	
	0	12E	0.025	0.009	-0.002	-0.009	-0.007		12E	--	0.003	--	--	--	--
	10E	0.025	0.010	-0.002	-0.009	-0.007	10E		--	0.004	--	--	--	--	
	8E	0.025	0.013	-0.002	-0.009	-0.007	8E		--	0.007	--	0.001	--	--	
	1/2"S	6E	0.025	0.011	-0.002	-0.009	-0.007		6E	--	0.003	--	0.002	--	--
	4E	0.025	0.011	-0.002	-0.003	-0.007	4E		--	0.003	--	0.003	--	--	
	1"S	2E	0.025	0.011	-0.002	-0.007	-0.007		2E	0.002	0.006	--	0.004	--	--
	A	0.026	0.014	-0.002	-0.006	0.006	A		0.004	0.012	--	0.006	--	--	
	B	0.026	0.022	-0.002	-0.006	-0.005	B		0.005	0.023	--	0.005	--	--	
	C	0.027	0.028	-0.001	-0.006	-0.005	C		0.011	0.039	-0.001	0.005	--	--	
	D	0.027	0.042	-0.001	-0.006	-0.005	D		0.011	0.045	-0.001	0.005	-0.001	--	
	E	0.025	0.046	-0.001	-0.005	-0.005	E		0.008	0.044	-0.001	0.007	-0.001	--	
	F	0.024	0.031	-0.001	-0.003	-0.005	F		0.006	0.023	-0.001	0.012	--	--	
	G	0.025	0.017	-0.001	0.004	-0.005	G		0.010	0.012	-0.001	0.024	0.004	--	
	H	0.026	0.009	-0.001	0.024	-0.003	H		0.019	0.005	-0.001	0.045	0.011	--	
	I	0.030	0.004	-0.001	0.048	0.003	I		0.037	0.002	-0.001	0.050	0.021	--	
	J	0.035	0.002	--	0.039	0.016	J		0.066	0.001	-0.001	0.025	0.032	--	
	K	0.037	0.001	--	0.021	0.029	K		0.083	--	-0.001	0.009	0.030	--	
	L	0.032	--	--	0.015	0.028	L		0.073	--	-0.001	0.004	0.023	--	
	M	0.026	--	--	0.011	0.028	M		0.059	--	-0.001	0.001	0.017	--	
	N	0.014	--	--	0.005	0.013	N		0.027	--	-0.001	-0.003	0.006	--	
2W	0.005	--	--	0.002	0.006	2W	0.023	--	-0.001	0.004	0.001	--			
4W	0.002	--	--	0.001	0.003	4W	0.016	--	-0.001	-0.005	-0.002	--			
6W	0.001	--	--	0.001	0.001	6W	0.014	--	-0.001	-0.005	-0.003	--			
8W	--	--	--	--	--	8W	0.014	--	-0.001	-0.005	-0.003	--			
						10W	0.014	--	-0.001	-0.005	-0.003	--			
						12W	0.014	--	-0.001	-0.005	-0.003	--			
						14W	0.014	--	-0.001	-0.005	-0.003	--			
						16W	--	--	--	--	--	--			

(Continued)

(3 of 6 sheets)

Table A17(Continued)

Vertical Pressure, psi, at Indicated Cells														
Forward, Avg Speed = 2.90 mph								Reverse, Avg Speed = 3.00 mph						
Row	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀
11	1" W	20E	0.19	0.32	0.26	0.10	0.33	1/2" S	16E	--	0.03	--	--	--
		18E	0.19	0.32	0.26	0.12	0.33		14E	--	0.05	--	--	--
		16E	0.18	0.34	0.28	0.12	0.32		12E	--	0.09	--	0.02	--
		14E	0.17	0.35	0.29	0.12	0.33		10E	-0.05	0.12	--	0.03	--
		12E	0.20	0.38	0.29	0.13	0.32		8E	0.02	0.20	--	0.05	0.03
		10E	0.15	0.45	0.29	0.15	0.33		6E	-0.03	0.22	0.16	0.07	0.04
		8E	0.14	0.51	0.32	0.17	0.33		4E	--	0.25	0.16	0.11	0.07
		6E	0.09	0.57	0.40	0.21	0.34		2E	0.04	0.32	--	0.16	0.13
		4E	0.14	0.64	0.40	0.22	0.36		A	0.05	0.50	--	0.21	0.18
		2E	0.14	0.67	0.42	0.27	0.41		B	0.08	0.81	--	0.29	0.13
		A	0.14	0.80	0.40	0.33	0.47		C	--	1.17	0.16	0.38	0.09
		B	0.10	1.02	0.45	0.36	0.48		D	--	1.38	0.20	0.41	0.08
		C	--	1.28	0.50	0.47	0.48		E	--	1.55	0.30	0.56	0.11
		D	--	1.47	0.60	0.53	0.48		F	0.08	1.62	0.45	0.73	0.23
		E	--	1.64	0.60	0.62	0.50		O	0.10	1.37	0.33	0.86	0.49
	1/2" W	F	0.06	1.71	0.55	0.76	0.59		N	0.10	0.95	0.10	0.88	0.90
		O	0.05	1.46	0.40	0.88	0.75		I	0.10	0.57	--	0.82	1.14
		N	0.04	1.03	0.20	0.93	1.02		J	0.09	0.35	--	0.68	0.98
		I	--	0.57	0.10	0.91	1.20		K	0.10	0.23	--	0.47	0.60
		J	--	0.31	--	0.77	0.99		L	0.10	0.18	--	0.42	0.48
		K	--	0.16	--	0.58	0.59		M	0.10	0.13	--	0.33	0.35
		L	--	0.01	--	0.18	0.38		W	0.09	0.08	--	0.21	0.19
		M	--	0.01	--	0.37	0.27		2W	0.09	0.07	--	0.13	0.11
		N	--	0.00	--	0.23	0.09		4W	0.08	0.06	--	0.09	0.08
		2W	--	--	--	0.12	0.02		6W	0.08	0.05	--	0.04	0.08
		4W	--	--	--	0.06	--		8W	0.10	0.05	--	0.03	0.08
		6W	--	--	--	0.03	--		10W	0.11	0.05	--	0.01	0.01
		8W	--	--	--	--	--		12W	0.10	0.08	--	--	0.08
									14W	0.11	0.06	--	--	0.06
									16W	0.10	0.05	--	--	0.07
									18W	0.11	0.05	--	--	0.06
									20W	0.10	0.05	--	--	0.07
									22W	--	--	--	--	--

Vertical Deflection, in., at Indicated Gages														
Forward, Avg Speed = 2.90								Reverse, Avg Speed = 3.00 mph						
Position	Location	D ₁	D ₂	D ₃	D ₄	D ₅		Position	Location	D ₁	D ₂	D ₃	D ₄	D ₅
11	1" W	20E	0.006	-0.055	-0.002	-0.019	-0.011	1/2" S	20E	--	--	0.001	--	--
		18E	0.006	-0.055	-0.002	-0.019	-0.011		18E	--	--	0.001	--	--
		16E	0.007	-0.055	-0.002	-0.019	-0.011		16E	--	--	0.001	--	--
		14E	0.007	-0.055	-0.002	-0.019	-0.011		14E	--	--	0.001	--	--
		12E	0.006	-0.054	-0.002	-0.019	-0.011		12E	--	--	0.001	0.001	--
		10E	0.007	-0.054	-0.002	-0.019	-0.011		10E	--	0.002	0.001	0.002	--
		8E	0.007	-0.053	-0.002	-0.019	-0.011		8E	--	0.003	0.001	0.002	--
		6E	0.007	-0.052	-0.002	-0.018	-0.011		6E	--	0.005	0.002	0.003	--
		4E	0.006	-0.052	-0.002	-0.018	-0.011		4E	--	0.006	0.002	0.003	--
		2E	0.006	-0.051	-0.002	-0.017	-0.011		2E	0.001	0.006	0.002	0.004	0.001
		A	0.007	-0.500	-0.002	-0.016	-0.010		A	0.001	0.011	0.002	0.006	0.002
		B	0.007	-0.410	-0.002	-0.017	-0.009		B	0.002	0.019	0.002	0.007	0.003
		C	0.008	-0.012	-0.002	-0.017	-0.008		C	0.003	0.035	0.002	0.007	0.004
		D	0.008	0.039	-0.001	-0.016	-0.008		D	0.002	0.073	0.002	0.008	0.005
		E	0.009	0.085	-0.001	-0.016	-0.008		E	0.002	0.095	0.002	0.009	0.005
		F	0.009	0.044	--	-0.013	-0.008		F	0.001	0.070	0.001	0.017	0.006
	1/2" W	O	0.009	0.022	--	-0.003	-0.008		O	0.002	0.007	0.001	0.033	0.008
		N	0.010	0.010	0.001	0.020	-0.005		N	0.004	-0.008	--	0.063	0.016
		I	0.013	0.004	0.001	0.051	0.004		I	0.009	-0.014	--	0.060	0.028
		J	0.016	--	0.002	0.050	0.020		J	0.014	-0.018	--	0.024	0.041
		K	0.018	--	0.002	0.022	0.037		K	0.015	-0.019	--	0.007	0.035
		L	0.017	--	0.002	0.016	0.037		L	0.014	-0.019	--	0.003	0.126
		M	0.014	--	0.002	0.010	0.031		M	0.012	-0.019	--	--	0.016
		N	0.010	--	0.001	0.004	0.018		N	0.008	-0.019	--	-0.003	0.006
		2W	0.005	--	0.001	0.001	0.009		2W	0.004	-0.020	--	-0.005	0.001
		4W	0.003	--	0.001	--	0.003		4W	0.002	-0.019	--	-0.005	--
		6W	0.001	--	0.001	--	--		6W	0.001	-0.019	--	-0.005	--
		8W	--	--	--	--	--		8W	0.001	-0.019	--	-0.005	--
									10W	0.001	-0.019	--	-0.005	--
									12W	0.001	-0.019	--	-0.005	--
									14W	0.001	-0.019	--	-0.005	--
									16W	0.001	-0.019	--	-0.005	--
									18W	0.001	-0.019	--	-0.005	--
									20W	0.002	-0.019	--	-0.005	--
									22W	--	--	--	--	--

(Continued)

(4 of 6 sheets)

Table A17(Continued)

Vertical Pressure, psi, at Indicated Gauges														
Forward, Avg Speed = 2.24						Reverse, Avg Speed = 1.77								
Row	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀
13	1" N	26E	0.23	0.12	0.14	0.07		1" S	26E	0.02	--	--	--	--
		24E	0.23	0.11	0.14	0.07			24E	0.02	--	--	--	--
		22E	0.25	0.11	0.14	0.07			22E	0.03	--	--	--	--
		20E	0.24	0.11	0.14	0.08			20E	0.03	--	--	--	--
		18E	0.23	0.12	0.14	0.08			18E	0.05	--	--	--	--
		16E	0.24	0.10	0.14	0.07			16E	0.06	--	--	--	--
		14E	0.26	0.12	0.14	0.08			14E	0.07	--	0.02	--	--
		12E	0.28	0.12	0.16	0.08			12E	0.09	0.05	0.02	--	--
		10E	0.32	0.13	0.17	0.08			10E	0.11	0.08	0.03	--	--
		8E	0.36	0.13	0.18	0.08			8E	0.15	0.09	0.03	0.01	--
	1/2" N	6E	0.40	0.14	0.20	0.09		1-1/2" S	6E	0.18	0.08	0.06	0.02	--
		4E	0.42	0.13	0.23	0.10			4E	0.20	0.09	0.08	0.04	--
	0	2E	0.49	0.12	0.26	0.13		1" S	2E	0.25	0.09	0.12	0.07	--
		A	0.55	0.13	0.29	0.16			A	0.35	0.07	0.16	0.08	--
	1/2" N	B	0.66	0.14	0.34	0.18		1" S	B	0.52	0.05	0.22	0.08	--
		C	0.83	0.17	0.40	0.18			C	0.73	0.16	0.30	0.06	--
	1" N	D	0.92	0.19	0.46	0.18		1/2" S	D	0.83	0.19	0.35	0.07	--
		E	0.97	0.20	0.51	0.19			E	0.90	0.19	0.41	0.08	--
		F	1.00	0.20	0.51	0.26			F	0.97	0.23	0.52	0.15	--
		G	0.89	0.17	0.64	0.35			G	0.80	0.14	0.58	0.27	--
		H	0.68	0.05	0.65	0.45		0	H	0.62	--	0.63	0.44	--
		I	0.43	-0.02	0.62	0.53			I	0.40	-0.05	0.58	0.52	--
		J	0.27	-0.02	0.53	0.46		1/2" S	J	0.27	-0.05	0.50	0.47	--
		K	0.17	-0.04	0.41	0.31			K	0.16	-0.05	0.38	0.30	--
		L	0.12	--	0.35	0.22		0	L	0.12	-0.05	0.31	0.24	--
		M	0.10	--	0.29	0.16			M	0.10	-0.05	0.26	0.18	--
		N	0.77	--	0.19	0.07		1/2" S	N	0.05	-0.05	0.17	0.08	--
		2W	0.04	--	0.12	0.04			2W	0.05	-0.05	0.12	0.04	--
		4W	0.03	--	0.08	0.01		1/2" S	4W	0.03	-0.05	0.07	0.01	--
		6W	0.02	--	0.05	0.01			6W	0.02	-0.05	0.05	--	--
		8W	0.02	--	0.04	0.01		1/2" S	8W	0.02	-0.05	0.03	--	--
		10W	0.02	--	0.03	0.01			10W	0.02	-0.05	0.02	--	--
		12W	0.02	--	0.02	0.01		1/2" S	12W	0.02	-0.05	0.02	--	--
		14W	0.02	--	0.02	--			14W	0.02	-0.05	0.01	--	--
		16W	0.02	--	0.01	--		1/2" S	16W	0.02	-0.05	0.01	--	--
		18W	0.02	--	0.01	--			18W	0.01	-0.05	0.01	--	--
		20W	--	--	--	--		20W	--	--	--	--	--	

Vertical Deflection, in., at Indicated Gauges												
Forward, Avg Speed = 2.24						Reverse, Avg Speed = 1.77						
Position	Location	D ₆	D ₇	D ₈ ⁸⁸	D ₉	Position	Location	D ₆	D ₇	D ₈ ⁸⁸	D ₉	
13	1" N	26E	0.031	0.008	-0.012	1" S	26E	0.002	--	--	--	
		24E	0.031	0.008	-0.012		24E	0.002	--	--	--	
		22E	0.031	0.008	-0.012		22E	0.002	--	--	--	
		20E	0.031	0.008	-0.012		20E	0.003	--	--	--	
		18E	0.031	0.008	-0.012		18E	0.004	--	--	--	
		16E	0.032	0.008	-0.012		16E	0.005	--	--	--	
		14E	0.033	0.008	-0.012		14E	0.008	--	--	--	
		12E	0.037	0.008	-0.012		12E	0.012	--	--	--	
		10E	0.042	0.008	-0.012		10E	0.017	--	--	--	
		8E	0.054	0.009	-0.012		8E	0.037	--	0.001	--	
	1/2" N	6E	0.043	0.009	-0.012	1-1/2" S	6E	--	--	0.001	--	
		4E	0.043	0.009	-0.011		4E	--	0.001	0.001	--	
	0	2E	0.048	0.010	-0.010	1" S	2E	0.010	0.002	0.003	0.003	
		A	0.062	0.011	-0.009		A	0.036	0.003	0.005	0.005	
	1/2" N	B	0.088	0.013	-0.008	1" S	B	0.083	0.004	0.004	0.007	
		C	0.138	0.017	-0.006		C	0.148	0.008	0.008	0.008	
	1" N	D	0.180	0.016	-0.006	1/2" S	D	0.145	0.011	0.008	0.008	
		E	0.193	0.017	-0.005		E	0.150	0.020	0.005	0.005	
		F	0.142	0.029	-0.005		F	0.078	0.037	0.010	0.010	
		G	0.081	1.038	-0.002		G	0.033	0.035	0.013	0.013	
		H	0.043	0.033	0.001	1/2" S	H	0.008	0.024	0.028	0.028	
		I	0.022	0.019	0.021		I	-0.006	0.012	0.050	0.050	
		J	0.010	0.004	0.047	0	J	-0.012	0.005	0.070	0.070	
		K	0.006	--	0.068		K	-0.013	0.003	0.064	0.064	
		L	0.005	--	0.067	1/2" S	L	-0.014	0.003	0.051	0.051	
		M	0.004	--	0.057		M	-0.015	0.004	0.037	0.037	
		N	0.003	--	0.033	1/2" S	N	-0.015	0.004	0.016	0.016	
		2W	0.003	--	0.018		2W	-0.014	0.003	0.005	0.005	
		4W	0.002	--	0.009	1/2" S	4W	-0.014	0.003	-0.001	-0.001	
		6W	0.001	--	0.004		6W	-0.014	0.004	-0.004	-0.004	
		8W	--	--	0.002	1/2" S	8W	-0.014	0.004	-0.005	-0.005	
		10W	--	--	0.001		10W	-0.014	0.004	-0.005	-0.005	
		12W	--	--	0.001	1/2" S	12W	-0.014	0.004	-0.005	-0.005	
		14W	--	--	--		14W	-0.014	0.004	-0.005	-0.005	
		16W	--	--	--	1/2" S	16W	-0.014	0.004	-0.005	-0.005	
		18W	--	--	--		18W	-0.014	0.004	-0.005	-0.005	
		20W	--	--	--		20W	--	--	--	--	

(Continued)

* No pressure recorded.
 ** Not working.

(3 of 6 sheets)

Table A17 (Concluded)

Vertical Pressure, psi, at Indicated Cells													
Forward, Avg Speed = 2.00 mph							Reverse, Avg Speed = 1.80 mph						
Row	Position	Location	P ₆	P ₇	P ₈	P ₉	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀
15	1" S	26E	0.07	--	0.06	--	0	18E	--	--	--	0.01	
		24E	0.07	--	0.07	--		16E	0.02	--	0.02	0.02	
		22E	0.07	--	0.07	--		14E	0.03	--	0.02	0.02	
		20E	0.07	--	0.07	--		12E	0.04	--	0.03	0.02	
		18E	0.07	--	0.07	--		10E	0.06	--	0.04	0.02	
		16E	0.06	--	0.07	--		8E	0.08	0.03	0.05	0.03	
		14E	0.08	--	0.08	--		6E	0.11	0.05	0.06	0.02	
		12E	0.10	0.02	0.09	0.02		4E	0.13	0.05	0.08	0.04	
		10E	0.12	0.03	0.10	0.02		2E	0.15	0.06	0.10	0.06	
		8E	0.14	0.04	0.11	0.02		A	0.21	0.07	0.13	0.07	
	1-1/2" S	6E	0.17	0.06	0.12	0.02	1/2" N	B	0.30	0.08	0.16	0.07	
		4E	0.22	0.08	0.13	0.03		C	0.41	0.08	0.22	0.07	
		2E	0.25	0.08	0.16	0.04		D	0.46	0.10	0.26	0.07	
		A	0.30	0.06	0.20	0.06		E	0.50	0.11	0.30	0.07	
		B	0.40	0.09	0.23	0.07		F	0.51	0.10	0.37	0.12	
		C	0.50	0.12	0.27	0.07		G	0.43	0.10	0.41	0.17	
		D	0.53	0.13	0.31	0.08		H	0.33	0.02	0.44	0.24	
		E	0.56	0.10	0.34	0.10		I	0.20	--	0.41	0.26	
		F	0.59	0.08	0.40	0.13		J	0.13	--	0.36	0.24	
		G	0.52	0.05	0.44	0.19		K	0.06	--	0.28	0.17	
	2" S	H	0.39	--	0.46	0.24	1/2" S	L	0.04	--	0.24	0.14	
		I	0.27	--	0.43	0.27		M	0.02	--	0.22	0.11	
		J	0.17	--	0.37	0.24		N	0.02	--	0.15	0.06	
		K	0.10	--	0.27	0.16		2W	--	--	0.11	0.05	
		L	0.07	--	0.23	0.13		4W	--	--	0.08	0.02	
	1-1/2" S	M	0.04	--	0.13	0.10		6W	--	--	0.06	--	
		N	0.03	--	0.12	0.03		8W	--	--	0.04	--	
		2W	0.02	--	0.07	0.02		10W	--	--	0.04	--	
		4W	0.01	--	0.05	0.01		12W	--	--	0.03	--	
		6W	--	--	0.03	--		14W	--	--	0.03	--	
		8W	--	--	0.02	--		16W	--	--	0.02	--	
		10W	--	--	0.01	--		18W	--	--	0.02	--	
		12W	--	--	--	--		20W	--	--	--	--	

Vertical Deflection, in., at Indicated Gages													
Forward, Avg Speed = 2.00 mph							Reverse, Avg Speed = 1.80 mph						
Position	Location	D ₆	D ₇	D ₈	D ₉		Position	Location	D ₆	D ₇	D ₈	D ₉	
15	1" S	26E	-0.035	--	-0.004		0	24E	--	--	--	0.001	
		24E	-0.035	--	-0.004			22E	--	--	--	0.001	
		22E	-0.035	--	-0.003			20E	--	--	--	0.001	
		20E	-0.035	--	-0.003			18E	--	--	--	0.001	
		18E	-0.035	--	-0.003			16E	0.001	--	--	0.001	
		16E	-0.035	--	-0.003			14E	0.002	--	--	0.001	
		14E	-0.034	--	-0.003			12E	0.002	--	--	0.001	
		12E	-0.034	--	-0.003			10E	0.003	--	--	0.001	
		10E	-0.030	--	-0.004			8E	0.005	--	--	0.001	
		8E	-0.032	--	-0.004			6E	0.006	--	--	0.002	
	1-1/2" S	6E	-0.032	--	-0.004		1/2" N	4E	0.007	--	--	0.002	
		4E	-0.032	--	-0.004			2E	0.011	--	--	0.003	
		2E	-0.031	--	-0.003			A	0.019	0.001	--	0.003	
		A	-0.027	--	-0.003			B	0.036	0.002	--	0.004	
		B	-0.018	0.001	-0.002			C	0.075	0.003	--	0.005	
		C	0.004	0.002	-0.002			D	0.095	0.004	--	0.005	
		D	0.056	0.002	-0.001			E	0.066	0.006	--	0.005	
		E	0.094	0.003	-0.001			F	0.011	0.009	--	0.007	
		F	0.050	0.006	-0.001			G	--	0.009	--	0.010	
		G	0.025	0.008	--			H	-0.007	0.006	--	0.017	
	2" S	H	0.012	0.008	0.004		1/2" S	I	-0.010	0.003	--	0.029	
		I	0.005	0.005	0.011			J	-0.012	0.001	--	0.041	
		J	0.003	0.001	0.026			K	-0.012	--	--	0.056	
		K	0.002	--	0.036			L	-0.012	--	--	0.028	
		L	0.001	--	0.037			M	-0.013	--	--	0.021	
	1-1/2" S	M	0.001	--	0.031			N	-0.013	--	--	0.010	
		N	--	--	0.018			2W	-0.013	--	--	0.005	
		2W	--	--	0.010			4W	-0.013	--	--	0.002	
		4W	--	--	0.005			6W	-0.012	--	--	--	
		6W	--	--	0.003			8W	-0.013	--	--	--	
		8W	--	--	0.001			10W	-0.013	--	--	--	
		10W	--	--	0.001			12W	-0.013	--	--	--	
		12W	--	--	0.001			14W	-0.013	--	--	--	
		14W	--	--	0.001			16W	-0.013	--	--	--	
		16W	--	--	--			20W	-0.036	--	--	--	

* B pressure recorded.
 ** B: working.

(6 of 6 sheets)

Table A-18

Multiple-Wheel Heavy Gear Load Flexible Pavement Test, Dynamic Instrumentation Loading Data

Item 3; Load Condition: 30 kips per wheel, Twin Tandem 747, 100 psi

Vertical Pressure, psi, at Indicated Cells														
Forward, Avg Speed = 2.08 mph							Reverse, Avg Speed = 2.52 mph							
Row	Position	Location	P ₁ ^a	P ₂	P ₃	P ₄	P ₅ ^a	Position	Location	P ₁ ^a	P ₂	P ₃	P ₄	P ₅ ^a
5	1 st	20E	-0.04	0.14	-0.18			1 st	20E	0.11	--	--	--	--
		18E	--	0.14	-0.17				18E	0.19	--	--	0.01	--
		16E	0.09	0.15	-0.14				16E	0.29	--	--	0.03	--
		14E	0.23	0.17	-0.08				14E	0.43	0.02	--	0.06	--
		12E	0.34	0.23	--				12E	0.57	0.05	--	0.14	--
		10E	0.46	0.34	0.10				10E	0.70	0.20	--	0.30	--
		8E	0.51	0.47	0.29				8E	0.73	0.42	--	0.53	--
		6E	0.51	0.50	0.46				6E	0.69	0.52	--	0.75	--
		4E	0.46	0.23	0.54				4E	0.61	0.34	--	0.77	--
		2E	0.39	0.04	0.43				2E	0.60	0.23	--	0.63	--
		A	0.42	-0.01	0.24				A	0.66	0.17	--	0.47	--
		B	0.56	-0.03	0.11				B	0.88	0.13	--	0.37	--
		C	0.83	-0.02	0.09				C	1.27	0.16	--	0.38	--
		D	1.03	0.02	0.10				D	1.50	0.18	--	0.45	--
		E	1.26	0.10	0.15				E	1.78	0.27	--	0.54	--
		F	1.81	0.45	0.40				F	2.30	0.71	--	0.89	--
		G	2.37	1.62	0.93				G	2.71	2.02	--	1.57	--
		H	5.50	2.64	1.74				H	5.80	2.78	--	2.48	--
		I	2.84	10.35	2.58				I	2.73	11.25	--	3.15	--
		J	2.60	3.43	6.50				J	2.39	3.40	--	6.90	--
		K	2.07	2.38	3.40				K	1.82	2.53	--	3.29	--
		L	1.79	1.40	3.20				L	1.54	1.55	--	3.02	--
		M	1.47	0.70	2.78				M	1.24	0.92	--	2.57	--
		N	0.98	0.19	1.80				N	0.75	0.40	--	1.52	--
		2W	0.58	0.06	1.01				2W	0.42	0.22	--	0.85	--
		4W	0.32	0.02	0.54				4W	0.21	0.18	--	0.42	--
		6W	0.17	--	0.27				6W	0.07	0.16	--	0.21	--
		8W	0.06	--	0.10				8W	--	0.16	--	0.10	--
		10W	0.01	--	--				10W	-0.04	0.16	--	0.03	--
		12W	--	--	--				12W	-0.04	0.15	--	0.02	--
		14W							14W	-0.05	0.16	--	--	--
		16W							16W	-0.05	0.16	--	--	--
		17W							17W	-0.06	0.15	--	--	--

(Continued)

^a No pressure recorded.

(1 of 7 sheets)

Table 2' (Continued)

Vertical Pressure, psi, at Indicated Cells														
Forward, Avg Speed = 2.55 mph							Reverse, Avg Speed = 2.95 mph							
Row	Position	Location	P ₁	P ₂	P ₃	P ₄	P ₅	Position	Location	P ₁	P ₂	P ₃	P ₄	P ₅
7	1" S	26E	-0.72	--	-1.22	--	--	0	24E	--	0.05	--	--	--
		24E	-0.71	--	-1.20	--	--		22E	0.31	0.10	--	--	--
		22E	-0.70	0.06	-1.20	--	--		20E	0.06	0.18	--	--	--
		20E	-0.65	0.12	-1.20	--	--		18E	0.26	0.32	--	--	--
		18E	-0.49	0.22	-1.20	--	--		16E	0.75	0.53	--	0.03	--
		16E	--	0.43	-1.20	0.02	--		14E	1.90	0.75	0.08	1.11	--
		14E	1.00	0.67	-1.16	0.10	--		12E	3.61	1.05	0.36	0.25	--
	1/2" M	12E	2.25	0.90	-0.92	0.25	--		10E	3.31	1.52	1.38	0.56	--
		10E	3.12	1.11	-0.22	0.51	--		8E	1.56	1.40	5.18	0.98	--
		8E	1.47	1.22	3.40	0.86	--		6E	0.74	1.33	5.90	0.51	--
		6E	0.30	1.24	6.38	1.30	--		4E	0.40	1.14	1.26	1.46	0.10
		4E	-0.19	1.06	1.86	1.42	0.25		2E	0.39	1.09	0.60	1.07	0.25
		2E	-0.26	0.97	0.16	1.20	0.10		A	0.62	1.20	0.36	0.77	--
		A	--	1.02	-0.32	0.68	--		B	1.44	1.60	0.20	0.57	--
		B	0.70	1.29	-0.40	0.51	--		C	3.46	2.26	0.20	0.56	--
		C	2.33	1.78	-0.40	0.49	--		D	5.18	2.67	0.26	0.65	--
		D	3.90	2.10	-0.38	0.51	--		E	7.50	3.17	0.44	0.83	--
		E	6.15	2.53	-0.22	0.62	--		F	9.37	4.15	1.86	1.39	--
		F	6.87	3.48	0.56	1.07	--		G	9.84	4.90	8.42	2.49	--
		G	9.70	4.50	6.32	1.91	--		H	10.52	5.22	12.90	4.00	--
		H	11.20	5.07	12.74	3.20	--		I	6.43	5.10	9.84	5.34	0.70
		I	7.43	5.28	8.98	4.56	0.65		J	2.60	4.38	17.08	5.72	19.55
		J	2.75	4.77	16.50	5.47	12.30		K	1.00	3.37	9.26	5.50	--
		K	0.94	3.77	10.82	5.86	--		L	0.59	2.87	4.24	5.00	2.80
		L	0.55	3.26	5.58	5.50	4.10		M	0.33	2.42	2.25	4.29	56.20
		M	0.33	2.75	2.60	4.82	3.20		N	--	1.61	0.72	2.79	0.31
		N	0.12	1.82	0.66	3.17	--		2W	-0.10	0.94	0.22	1.60	--
		2W	0.01	1.14	0.24	1.80	--		4W	-0.17	0.53	0.06	0.93	--
		4W	--	0.66	0.06	0.95	--		6W	-0.17	0.32	--	0.44	--
		6W	--	0.34	--	0.43	--		8W	-0.17	0.16	--	0.18	--
		8W	--	0.17	--	0.14	--		10W	-0.15	0.02	--	0.06	--
		10W	--	0.01	--	--	--		12W	--	0.01	--	--	--
		12W	--	--	--	--	--		14W	-0.12	--	--	--	--
									16W	-0.11	--	--	--	--
									18W	-0.10	--	--	--	--
									20W	-0.10	--	--	--	--
									22W	-0.10	--	--	--	--
									24W	-0.10	--	--	--	--
									26W	-0.10	--	--	--	--

(Continued)

(2 of 7 sheets)

Table A-III(Continued)

Vertical Pressure, psi, at Indicated Cells														
Forward, Avg Speed = 2.7 mph							Reverse, Avg Speed = 2.6 mph							
Row	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀
9	2"S	12E	1.90	0.50	1.10	0.18	1.10	4"S	12E	2.50	1.00	--	0.44	--
	1-1/2"S	10E	2.10	0.60	1.30	0.42	1.10	10E	3.00	1.16	0.80	0.90	--	
		8E	1.00	0.84	1.90	0.76	1.00	8E	2.24	1.16	1.60	1.40	--	
		6E	--	0.80	1.90	1.00	1.00	6E	1.50	1.16	1.80	1.90	--	
	1"S	4E	-0.60	0.60	1.20	1.00	1.00	4E	1.10	1.00	1.40	1.90	--	
		2E	-0.70	0.60	0.70	0.80	0.75	2E	1.00	1.10	1.00	1.60	--	
		A	-0.50	0.58	0.50	0.50	0.80	A	1.10	1.10	1.00	1.00	--	
		B	0.42	0.70	0.30	0.32	0.90	B	1.90	1.50	1.00	0.90	--	
		C	2.80	1.50	0.24	0.36	0.90	C	3.90	1.90	1.00	1.10	--	
		D	4.40	1.60	24.00	0.42	0.95	D	6.20	2.40	1.00	1.16	--	
		E	6.60	1.90	0.30	0.56	0.95	E	8.90	2.90	1.20	1.50	--	
		F	10.60	2.70	0.80	1.16	0.95	F	11.60	3.60	2.30	2.50	--	
		O	12.24	3.40	3.70	2.16	1.00	O	12.64	4.10	5.50	3.90	--	
		H	14.16	3.80	5.40	3.36	0.95	H	14.10	4.10	6.00	6.10	--	
		I	10.00	4.10	5.10	4.60	--	I	9.70	4.40	5.60	7.50	--	
		J	4.10	3.70	7.00	5.30	--	J	4.70	3.60	5.10	7.90	--	
		K	1.38	3.00	5.50	5.30	--	K	2.20	3.00	3.90	7.20	--	
		L	0.90	2.50	3.50	5.00	--	L	1.70	2.50	2.10	6.40	--	
		M	0.44	2.10	1.90	4.20	--	M	1.30	2.00	1.20	5.40	--	
		N	0.10	1.30	0.80	2.70	--	N	0.70	1.30	0.80	3.40	--	
		2W	--	0.82	0.50	1.50	--	2W	0.52	1.00	0.70	2.00	0.50	
		4W	--	0.32	0.20	0.80	--	4W	0.50	0.60	0.70	1.00	0.50	
		6W	--	0.16	--	0.40	--	6W	0.48	0.40	0.70	0.50	0.50	
		8W	--	--	--	0.18	--	8W	0.48	0.36	0.70	0.30	0.50	
		10W	--	--	--	--	--	10W	0.48	0.30	0.70	--	0.50	
								12W	0.48	0.20	0.70	--	0.50	
								14W	0.48	--	0.70	--	0.50	
							16W	0.48	--	0.70	--	0.50		
							18W	0.48	--	0.70	--	0.50		
							20W	0.48	--	0.70	--	0.50		
							22W	0.48	--	0.70	--	0.50		
							24W	0.48	--	0.70	--	0.50		
							26W	0.48	--	0.70	--	0.50		

Vertical Deflection, in., at Indicated Gages													
Forward, Avg Speed = 2.7 mph						Reverse, Avg Speed = 2.6 mph							
Position	Location	D ₁	D ₂	D ₃	D ₄	D ₅	Position	Location	D ₁	D ₂	D ₃	D ₄	D ₅
9	2"S	12E	0.020	0.007	--	-0.001	4"S	12E	0.015	0.006	--	0.002	0.004
	1-1/2"S	10E	0.016	0.004	0.002	--	10E	0.010	0.003	--	0.003	0.005	
		8E	0.013	0.002	0.002	0.002	8E	0.008	0.002	--	0.004	0.009	
		6E	0.010	0.002	0.004	0.006	6E	0.010	0.002	--	0.004	0.011	
	1"S	4E	0.013	0.003	0.003	0.027	4E	0.015	0.004	--	0.003	0.028	
		2E	0.017	0.006	0.002	0.048	2E	0.025	0.008	--	0.002	0.022	
		A	0.029	0.011	0.002	0.032	A	0.045	0.016	--	0.001	0.003	
		B	0.054	0.021	0.001	0.024	B	0.080	0.026	--	0.001	-0.003	
		C	0.083	0.030	0.002	0.020	C	0.103	0.032	--	0.003	-0.006	
		D	0.089	0.033	0.002	0.020	D	0.103	0.033	--	0.004	-0.006	
		E	0.092	0.036	0.003	0.019	E	0.105	0.034	--	0.005	-0.006	
		F	0.111	0.038	0.006	0.019	F	0.106	0.030	--	0.009	-0.002	
		O	0.085	0.030	0.011	0.023	O	0.075	0.021	--	0.014	0.005	
		H	0.050	0.020	0.015	0.031	H	0.035	0.010	--	0.017	0.018	
		I	0.025	0.010	0.019	0.046	I	0.017	0.004	--	0.018	0.037	
		J	0.012	0.005	0.020	0.060	J	0.010	--	--	0.016	0.047	
		K	0.005	0.002	0.017	0.070	K	0.005	-0.002	--	0.011	0.049	
		L	0.004	0.002	0.015	0.075	L	0.004	-0.003	--	0.009	0.048	
		M	--	--	0.012	0.075	M	0.004	-0.004	--	0.007	0.045	
		N	--	--	0.007	0.059	N	0.003	-0.004	--	0.003	0.027	
		2W	--	0.500	0.004	0.038	2W	0.003	-0.004	--	0.002	0.012	
		4W	--	0.200	0.001	0.022	4W	0.002	-0.004	--	--	0.002	
		6W	--	--	--	0.012	6W	0.002	-0.004	--	--	-0.005	
		8W	--	--	--	0.006	8W	0.002	-0.004	--	--	-0.009	
		10W	--	--	--	0.003	10W	0.002	-0.004	--	--	-0.010	
		12W	--	--	--	0.002	12W	--	-0.004	--	--	-0.011	
		14W	--	--	--	0.001	14W	--	-0.004	--	--	-0.011	
		16W	--	--	--	0.001	16W	--	-0.004	--	--	-0.010	
		18W	--	--	--	--	18W	--	-0.004	--	--	-0.010	
							20W	--	-0.004	--	--	-0.010	
							22W	--	-0.004	--	--	-0.010	
							24W	--	-0.004	--	--	-0.010	
							26W	--	-0.004	--	--	-0.010	

(Continued)

* Not working.

(3 of 7 sheets)

Table A1(Continued)

Vertical Pressure, psi, at Indicated Cells														
Forward, Avg Speed = 2.6 mph							Reverse, Avg Speed = 2.7 mph							
Row	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀
10	1" S	12E	2.00	0.50	-2.80	0.40	-1.50	0	12E	3.90	0.62	--	0.50	--
		10E	3.00	0.64	-2.30	0.80	-1.50		10E	4.00	0.90	1.70	0.90	--
		8E	1.40	0.70	-0.30	1.20	-1.50		8E	2.00	1.04	1.70	1.42	--
		6E	--	0.90	1.00	1.64	-1.50		6E	1.00	1.00	2.10	1.96	--
		4E	-0.50	0.70	-0.60	1.76	-1.00		4E	0.60	0.80	0.70	1.86	1.00
		2E	-0.70	0.54	-1.40	1.40	--		2E	0.50	0.80	0.50	1.50	3.75
		A	-0.60	0.50	-1.40	0.90	-1.50		A	0.60	0.90	0.50	1.10	0.75
		B	--	0.70	-1.70	0.70	-1.50		B	1.10	1.20	0.40	0.90	1.25
		C	1.60	1.10	-1.80	0.80	-1.50		C	3.00	1.60	0.40	0.96	1.25
		D	3.20	1.50	-1.80	0.84	-1.50		D	4.80	1.44	0.30	1.00	1.25
	1" W	E	5.30	1.70	-1.80	1.00	-1.50		E	7.00	2.30	0.60	1.30	1.25
		F	8.42	2.40	-1.80	1.72	-1.25		F	9.10	2.90	1.50	2.10	1.25
		G	9.77	2.90	1.10	2.90	-1.25		G	10.10	3.40	4.90	3.44	1.25
		H	11.80	3.50	4.50	4.50	-1.25		H	11.70	3.80	5.90	5.10	1.25
		I	8.40	3.50	3.20	6.00	2.75		I	7.70	3.60	4.90	6.60	6.25
		J	3.60	3.40	7.10	6.90	13.20		J	3.30	3.20	7.22	7.00	17.50
		K	1.30	2.60	5.10	7.00	--		K	1.30	2.40	2.40	6.50	0.75
		L	0.90	2.30	3.00	6.40	7.00		L	0.70	1.90	0.50	5.50	10.75
		M	0.52	1.80	1.75	5.40	25.00		M	0.50	1.70	-0.30	5.00	27.75
		N	0.30	1.40	0.60	3.40	1.50		N	--	1.20	-0.50	3.20	1.75
	2W	--	0.90	0.30	1.90	7.50	2W	-0.30	0.90	-0.50	2.00	0.75		
	4W	--	0.50	--	1.00	0.50	4W	-0.30	0.50	-0.60	1.20	1.00		
	6W	--	0.36	--	0.50	0.25	6W	-0.30	0.40	-0.60	0.50	1.00		
	8W	--	0.20	--	0.20	0.25	8W	-0.30	0.10	-0.60	0.30	1.00		
	10W	--	--	--	--	--	10W	-0.30	--	-0.60	0.22	1.00		
	12W	--	--	--	--	--	12W	-0.30	--	-0.60	--	1.00		
	14W	--	--	--	--	--	14W	-0.30	--	-0.60	--	1.00		
	16W	--	--	--	--	--	16W	-0.30	--	-0.60	--	1.00		
	18W	--	--	--	--	--	18W	-0.30	--	-0.60	--	1.00		
	20W	--	--	--	--	--	20W	-0.30	--	-0.50	--	1.00		
	22W	--	--	--	--	--	22W	-0.24	--	-0.50	--	1.00		
	24W	--	--	--	--	--	24W	-0.24	--	-0.50	--	1.00		
	26W	--	--	--	--	--	26W	-0.20	--	-0.50	--	1.00		

Vertical Deflection, in., at Indicated Gages														
Forward, Avg. Speed = 2.6 mph							Reverse, Avg. Speed = 2.7 mph							
Position	Location	D ₁	D ₂	D ₃	D ₄	D ₅	Position	Location	D ₁	D ₂	D ₃	D ₄	D ₅	
10	1" S	12E	-0.049	0.001	--	-0.003	-0.049	0	12E	0.020	0.011	--	0.005	--
		10E	-0.055	-0.001	--	-0.002	-0.048	0	10E	0.018	0.009	--	0.007	--
		8E	-0.060	-0.003	--	--	-0.045	0	8E	0.016	0.008	--	0.009	0.007
		6E	-0.060	-0.003	--	--	-0.041	0	6E	0.018	0.010	--	0.007	0.015
		4E	-0.057	-0.001	--	--	-0.031	0	4E	0.020	0.013	--	0.006	0.026
		2E	-0.053	0.001	--	-0.002	-0.028	0	2E	0.032	0.019	--	0.006	0.077
		A	-0.040	0.010	--	-0.003	-0.036	0	A	0.055	0.036	--	0.005	0.021
		B	-0.019	0.025	--	-0.003	-0.042	0	B	0.091	0.049	--	0.005	0.018
		C	0.105	0.073	--	-0.003	-0.046	0	C	0.148	0.058	--	0.007	0.015
		D	0.080	0.056	--	--	-0.046	0	D	0.100	0.061	--	0.009	0.015
	1" W	E	0.070	0.052	--	--	-0.048	0	E	0.105	0.062	--	0.011	0.017
		F	0.139	0.056	--	0.004	-0.046	0	F	0.155	0.057	--	0.017	0.023
		G	0.105	0.042	--	0.012	-0.041	0	G	0.050	0.037	--	0.024	0.036
		H	0.055	0.029	--	0.018	-0.029	0	H	0.015	0.019	--	0.029	0.062
		I	0.026	0.015	--	0.023	0.017	0	I	--	0.009	--	0.029	0.108
		J	0.011	0.007	--	0.025	0.037	0	J	-0.012	0.004	--	0.026	0.123
		K	0.005	0.004	--	0.021	0.037	0	K	-0.014	--	--	0.019	0.110
		L	0.004	0.001	--	0.019	0.108	0	L	-0.015	--	--	0.015	0.126
		M	--	0.001	--	0.017	0.143	0	M	-0.015	--	--	0.011	0.127
		N	--	--	--	0.008	0.104	0	N	-0.017	--	--	0.006	0.036
	2W	--	--	--	0.003	0.059	0	2W	-0.017	--	--	0.003	0.006	
	4W	--	--	--	--	0.030	0	4W	-0.018	--	--	--	-0.010	
	6W	--	--	--	--	0.015	0	6W	-0.018	--	--	--	-0.020	
	8W	--	--	--	--	0.006	0	8W	-0.019	--	--	--	-0.025	
	10W	--	--	--	--	0.003	0	10W	-0.019	--	--	--	-0.027	
	12W	--	--	--	--	--	0	12W	-0.019	--	--	--	-0.028	
	14W	--	--	--	--	--	0	14W	-0.020	--	--	--	-0.028	
	16W	--	--	--	--	--	0	16W	-0.020	--	--	--	-0.029	
	18W	--	--	--	--	--	0	18W	-0.020	--	--	--	-0.029	
	20W	--	--	--	--	--	0	20W	-0.020	--	--	--	-0.029	
	22W	--	--	--	--	--	0	22W	-0.020	--	--	--	-0.029	
	24W	--	--	--	--	--	0	24W	-0.020	--	--	--	-0.029	
	26W	--	--	--	--	--	0	26W	-0.020	--	--	--	-0.029	
							0							

(Continued)

* Not working.

(4 of 7 sheets)

Table A18(Continued)

Vertical Pressure, psi, at Indicated Cells														
Forward, Avg Speed = 2.9 mph							Reverse, Avg Speed = 2.7 mph							
Row	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀
11	0	12E	4.20	3.00	3.30	1.10	1.25	0	12E	3.50	3.00	0.20	0.50	--
		10E	4.90	3.10	3.42	1.30	1.25		10E	3.10	3.00	0.80	0.90	-0.25
		8E	3.40	3.40	5.00	1.70	1.25		8E	1.30	3.20	2.60	1.40	-0.25
		6E	2.22	3.20	6.00	2.10	1.10		6E	0.20	3.10	2.20	1.70	-0.25
		4E	1.80	3.10	4.20	2.10	1.00		4E	-0.30	3.00	-0.60	1.70	0.10
		2E	1.60	3.20	3.62	1.90	2.25		2E	-0.42	2.80	-1.30	1.10	2.10
		A	1.80	3.24	3.40	1.40	0.75		A	-0.38	3.00	-1.40	0.80	-0.90
		B	2.00	3.44	3.22	1.30	0.75		B	--	3.30	-1.40	0.50	-0.90
		C	2.80	3.70	3.20	1.30	0.80		C	1.00	3.40	-1.40	0.60	-0.90
		D	3.50	4.00	3.10	1.40	0.80		D	1.90	3.70	-1.44	0.70	-0.90
		E	4.30	4.30	3.10	1.50	0.90		E	2.90	4.10	-1.46	0.80	-0.95
		F	5.70	4.70	3.00	2.00	0.90		F	4.00	4.80	-1.02	1.44	-0.95
		G	6.20	5.40	3.40	2.90	1.00		G	4.90	5.00	0.24	2.40	-0.95
		H	6.40	5.50	3.84	3.90	0.75		H	5.30	5.20	1.10	3.50	-0.90
		I	4.40	5.70	3.60	4.90	--		I	4.00	5.40	1.06	4.60	-1.00
	J	2.20	5.40	4.20	5.40	-0.25	J	2.10	5.20	1.80	4.90	-1.05		
	K	0.90	4.90	3.24	5.22	-0.25	K	1.00	3.10	1.10	4.60	-0.95		
	L	0.60	4.70	2.20	4.40	-0.25	L	0.60	2.30	0.50	4.10	-1.00		
	M	0.30	4.30	1.50	4.00	-0.30	M	0.42	1.80	0.18	3.60	-1.10		
	N	--	3.50	0.80	2.76	--	N	--	1.30	-0.50	2.44	-0.90		
	2W	--	3.20	0.50	1.60	0.25	2W	--	0.90	-0.64	1.50	-0.75		
	4W	--	2.90	0.20	0.90	0.30	4W	--	0.70	-0.76	0.80	-0.75		
	6W	--	2.70	0.20	0.50	0.30	6W	--	0.40	-0.80	0.40	-0.75		
	8W	--	2.50	0.20	0.22	0.25	8W	--	0.20	-0.92	0.20	-0.75		
	10W	--	2.30	0.10	--	0.25	10W	--	--	-0.92	--	-0.75		
	12W	--	2.10	--	--	--	12W	--	--	-0.80	--	-0.75		
	14W	--	2.00	--	--	--	14W	--	--	-0.80	--	-0.75		
	16W	--	2.00	--	--	--	16W	--	--	-0.80	--	-0.75		
	18W	--	1.50	--	--	--	18W	--	--	-0.80	--	-0.75		
	20W	--	1.40	--	--	--	20W	--	--	-0.80	--	-0.75		
	22W	--	1.00	--	--	--	22W	--	--	-0.80	--	-0.75		
	24W	--	--	--	--	--	24W	--	--	-0.80	--	-0.75		
							26W	--	--	-0.80	--	--		

Vertical Deflection, in., at Indicated Orags

Forward, Avg Speed = 2.9 mph						Reverse, Avg Speed = 2.7 mph							
Position	Location	D ₁	D ₂	D ₃ ^a	D ₄	D ₅	Position	Location	D ₁	D ₂	D ₃ ^a	D ₄	D ₅
11	0	12E	0.035	--	-0.003	0.010	0	12E	-0.008	0.011	--	--	--
		10E	0.028	-0.004	-0.002	0.011		10E	-0.015	0.008	0.005	0.003	0.010
		8E	0.025	-0.005	--	0.014		8E	-0.016	0.007	0.007	0.010	0.010
		6E	0.025	-0.006	--	0.019		6E	-0.017	0.009	0.005	0.017	0.017
		4E	0.024	-0.004	--	0.025		4E	-0.013	0.013	0.004	0.024	0.024
		2E	0.028	--	-0.001	0.025		2E	-0.009	0.021	0.004	0.024	0.024
		A	0.035	0.010	-0.002	0.020		A	0.001	0.034	0.004	0.020	0.020
		B	0.040	0.027	-0.002	0.015		B	0.016	0.054	0.004	0.015	0.015
		C	0.050	0.043	-0.001	0.011		C	0.030	0.064	0.006	0.015	0.015
		D	0.055	0.052	--	0.010		D	0.035	0.065	0.007	0.015	0.015
		E	0.060	0.056	--	0.009		E	0.035	0.065	0.010	0.016	0.016
		F	0.060	0.060	0.005	0.010		F	0.035	0.061	0.016	0.019	0.019
		O	0.050	0.050	0.013	0.017		J	0.022	0.038	0.024	0.035	0.035
		H	0.030	0.030	0.020	0.029		H	0.006	0.020	0.026	0.059	0.059
		I	0.015	0.014	0.027	0.063		I	-0.005	0.009	0.029	0.103	0.103
		J	0.007	0.006	0.030	0.095		J	-0.010	0.004	0.026	0.119	0.119
		K	--	0.001	0.026	0.111		K	-0.013	--	0.018	0.122	0.122
		L	--	--	0.022	0.127		L	-0.014	--	0.013	0.125	0.125
		M	--	--	0.018	0.136		M	-0.014	--	0.008	0.117	0.117
		N	--	-0.003	0.012	0.101		N	-0.014	--	0.003	0.069	0.069
		2W	--	-0.003	0.006	0.058		2W	-0.015	--	--	0.036	0.036
		4W	--	-0.003	0.002	0.030		4W	-0.014	--	-0.003	0.019	0.019
		6W	--	-0.003	--	0.016		6W	-0.014	--	-0.003	0.009	0.009
		8W	--	-0.003	--	0.008		8W	-0.014	--	-0.003	0.005	0.005
		10W	--	--	--	0.003		10W	-0.014	--	-0.003	0.004	0.004
		12W	--	--	--	--		12W	-0.014	--	-0.003	0.004	0.004
								14W	-0.013	--	-0.003	0.003	0.003
								16W	-0.013	--	-0.003	0.003	0.003
								18W	-0.013	--	-0.003	0.004	0.004
								20W	-0.013	--	-0.003	0.004	0.004
								22W	-0.013	--	-0.003	0.004	0.004
								24W	-0.013	--	-0.003	0.004	0.004
								26W	-0.013	--	-0.003	0.004	0.004

(Continued)

* Not working.

(5 of 7 sheets)

Table A2(Continued)

Vertical Pressure, psi, at Indicated Cells														
Forward, Avg Speed = 2.65 mph						Reverse, Avg Speed = 2.50 mph								
Row	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀
13	1" W	26E	0.42	0.29	0.42	0.46	0.33	0	26E	--	--	0.07	0.06	--
		24E	0.42	0.22	0.40	0.48	0.33		24E	0.03	0.07	0.05	0.08	--
		22E	0.42	0.32	0.42	0.48	0.34		22E	0.06	0.17	0.08	0.10	--
		20E	0.44	0.32	0.39	0.48	0.35		20E	0.08	0.13	0.07	0.12	--
		18E	0.48	0.43	0.40	0.50	0.45		18E	0.16	0.30	0.07	0.17	--
		16E	0.65	0.54	0.40	0.53	0.35		16E	0.39	0.41	0.06	0.20	--
		14E	1.02	0.60	0.42	0.63	0.35		14E	0.95	0.63	0.05	0.33	--
		12E	1.53	0.91	0.46	0.80	0.35		12E	1.66	0.57	0.05	0.49	--
		10E	1.64	0.97	0.51	1.01	0.35		10E	1.69	0.76	0.27	0.80	--
		8E	1.20	0.98	0.84	1.30	0.35		8E	0.97	0.96	0.88	1.20	0.02
		6E	0.71	1.03	1.05	1.53	0.35		6E	0.21	0.80	0.89	1.36	0.02
		4E	0.47	0.92	0.73	1.51	0.28		4E	--	0.70	0.46	1.31	-0.02
	0	2E	0.43	0.97	0.50	1.38	0.21		2E	-0.06	0.71	0.11	0.97	-0.12
		A	0.49	0.92	0.34	1.11	0.22		A	-0.03	0.79	-0.05	0.66	-0.14
		B	0.72	1.02	0.29	0.98	0.22		B	0.10	0.90	-0.13	0.51	-0.08
		C	1.19	1.43	0.22	0.97	0.23		C	0.63	1.35	-0.11	0.54	-0.05
		D	1.54	1.65	0.25	1.03	0.23		D	0.98	1.50	-0.13	0.58	-0.05
		E	1.92	1.73	0.18	1.15	0.23		E	1.40	1.81	-0.09	0.75	-0.05
		F	2.53	2.29	0.47	1.54	0.22		F	2.37	2.10	--	1.20	--
		G	3.42	2.70	0.72	2.14	0.21		G	2.97	2.59	0.57	1.89	--
		H	3.11	2.80	1.23	2.81	0.21		H	2.82	2.86	1.33	2.70	--
		I	1.98	3.02	1.80	3.41	0.20		I	2.00	2.71	1.70	3.34	--
		J	1.16	2.62	1.49	3.71	0.12		J	1.20	2.59	1.46	3.55	-0.10
		K	0.53	2.21	1.05	3.50	0.08		K	0.52	2.01	1.18	3.24	0.08
		L	0.37	2.04	0.83	3.18	--		L	0.30	1.75	0.95	3.02	0.10
	1" S	M	0.23	1.12	0.57	2.80	--		M	0.18	1.57	0.78	2.61	0.10
		N	0.04	0.85	0.24	1.91	--		N	-0.10	1.19	0.44	1.82	0.06
		2W	--	0.51	0.08	1.23	--		2W	-0.19	0.74	0.28	1.11	0.12
		4W	-0.03	0.34	--	0.71	--		4W	-0.28	0.45	0.24	0.60	0.10
		6W	-0.04	0.11	--	0.36	--		6W	-0.27	0.39	0.21	0.30	0.10
		8W	-0.04	0.05	-0.04	0.11	--		8W	-0.25	0.28	0.20	0.10	0.10
		10W	-0.03	--	-0.03	0.04	--		10W	-0.25	0.13	0.15	0.02	0.10
		12W	-0.02	--	-0.02	--	--		12W	-0.25	0.20	0.18	--	0.10
		14W	--	--	--	--	--		14W	-0.25	0.15	0.18	--	0.08
		16W	--	--	--	--	--		16W	-0.24	0.11	0.19	--	0.08
		18W	--	--	--	--	--		18W	-0.24	0.13	0.18	--	0.05
		20W	--	--	--	--	--		20W	-0.24	0.16	0.19	--	0.05
		22W	--	--	--	--	--		22W	-0.25	0.14	0.18	--	0.03
		24W	--	--	--	--	--		24W	-0.25	0.10	0.20	--	0.03
		26W	--	--	--	--	--		26W	-0.25	0.23	0.20	--	0.03

Vertical Deflection, in., at Indicated Cells												
Forward, Avg Speed = 2.65 mph						Reverse, Avg Speed = 2.50 mph						
Row	Position	Location	D ₆	D ₇	D ₈	D ₉	Position	Location	D ₆	D ₇	D ₈	D ₉
13	1" W	26E	-0.004	--	-0.002	-0.002	0	26E	0.001	--	--	0.001
		24E	-0.003	--	-0.002	-0.002		24E	0.002	--	--	0.001
		22E	-0.002	--	-0.002	-0.002		22E	0.003	--	--	0.001
		20E	--	--	-0.002	-0.002		20E	0.006	--	--	0.001
		18E	0.003	--	-0.002	-0.002		18E	0.010	0.001	0.002	0.002
		16E	0.005	--	-0.002	-0.002		16E	0.014	0.002	0.002	0.002
		14E	0.008	--	-0.001	-0.001		14E	0.012	0.002	0.003	0.003
		12E	0.005	--	-0.001	-0.001		12E	0.008	0.004	0.004	0.004
		10E	0.002	--	0.001	-0.018		10E	0.005	0.005	0.006	0.006
		8E	--	--	0.002	-0.016		8E	0.005	0.006	0.011	0.011
		6E	--	--	0.003	-0.011		6E	0.006	0.006	0.020	0.020
		4E	0.001	--	0.002	-0.003		4E	0.009	0.005	0.031	0.031
	0	2E	0.005	--	0.001	-0.001		2E	0.017	0.004	0.034	0.034
		A	0.014	--	--	-0.010		A	0.031	0.004	0.025	0.025
		B	0.030	--	--	-0.017		B	0.047	0.005	0.022	0.022
		C	0.046	--	0.001	-0.021		C	0.056	0.007	0.021	0.021
		D	0.051	--	0.002	-0.022		D	0.058	0.008	0.020	0.020
		E	0.055	--	0.003	-0.022		E	0.059	0.010	0.022	0.022
		F	0.059	--	0.007	-0.022		F	0.052	0.017	0.028	0.028
		G	0.049	--	0.014	-0.017		G	0.034	0.023	0.040	0.040
		H	0.031	--	0.020	-0.004		H	0.017	0.026	0.065	0.065
		I	0.017	--	0.025	0.032		I	0.006	0.027	0.114	0.114
		J	0.009	--	0.027	0.104		J	0.002	0.024	0.136	0.136
		K	0.004	--	0.024	0.097		K	-0.002	0.017	0.119	0.119
		L	0.003	--	0.020	0.112		L	-0.002	0.014	0.137	0.137
	1" S	M	0.002	--	0.017	0.148		M	-0.002	0.010	0.143	0.143
		N	0.001	--	0.010	0.114		N	-0.003	0.006	0.056	0.056
		2W	0.001	--	0.005	0.067		2W	-0.003	0.003	0.022	0.022
		4W	--	--	0.003	0.038		4W	-0.003	0.001	0.005	0.005
		6W	--	--	0.001	0.022		6W	-0.003	--	-0.005	-0.005
		8W	--	--	--	0.012		8W	-0.003	--	-0.009	-0.009
		10W	--	--	--	0.006		10W	-0.003	--	-0.011	-0.011
		12W	--	--	--	0.003		12W	-0.003	--	-0.011	-0.011
		14W	--	--	--	0.002		14W	-0.003	--	-0.011	-0.011
		16W	--	--	--	0.001		16W	-0.003	--	-0.011	-0.011
		18W	--	--	--	--		18W	-0.003	--	-0.011	-0.011
		20W	--	--	--	--		20W	-0.003	--	-0.011	-0.011
		22W	--	--	--	--		22W	-0.003	--	-0.011	-0.011
		24W	--	--	--	--		24W	-0.003	--	-0.011	-0.011
		26W	--	--	--	--		26W	-0.003	--	-0.011	-0.011

(Continued)

• Not working.

(6 of 7 sheets)

Table A (Concluded)

Vertical Pressure, psi, at Indicated Cells														
Forward, Avg Speed = 15.0 mph							Reverse, Avg Speed = 2.66 mph							
Row	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀
15	1'S	26E	-0.06	0.57	-0.30	0.28	-0.50	0	26E	--	0.08	0.04	--	0.05
		24E	-0.08	0.57	-0.30	0.26	-0.52	1'S	24E	--	0.06	--	--	0.04
		22E	-0.09	0.57	-0.30	0.27	-0.57	22E	--	0.06	--	--	0.03	
		20E	-0.05	0.67	-0.35	0.27	-0.54	20E	--	0.19	--	--	0.02	
		18E	-0.02	0.55	-0.38	0.28	-0.55	18E	0.06	0.27	--	0.04	--	
		16E	0.04	0.65	-0.42	0.30	-0.56	16E	0.16	0.27	-0.03	0.05	--	
		14E	0.21	0.78	-0.38	0.36	-0.56	14E	0.37	0.55	--	0.11	--	
		12E	0.32	0.93	-0.35	0.45	-0.56	12E	0.60	0.50	--	0.24	--	
		10E	0.37	1.06	-0.30	0.56	-0.56	10E	0.66	0.82	0.12	0.40	0.03	
		8E	0.25	1.06	-0.20	0.73	-0.56	8E	0.52	0.72	0.31	0.60	0.04	
		6E	0.15	1.03	-0.16	0.84	-0.56	6E	0.34	0.80	0.42	0.72	0.06	
		4E	0.04	0.97	-0.16	0.86	-0.58	4E	0.24	0.59	0.33	0.69	0.08	
		2E	--	1.02	-0.27	0.75	-0.56	2E	0.20	0.70	0.25	0.50	0.04	
		A	0.05	0.98	-0.35	0.66	-0.56	A	0.19	0.61	0.10	0.38	0.04	
		B	0.20	1.12	-0.43	0.60	-0.58	B	0.28	0.83	0.13	0.28	0.04	
		C	0.46	1.44	-0.41	0.60	-0.60	C	0.47	0.95	0.05	0.28	0.04	
		D	0.65	1.32	-0.45	0.67	-0.60	D	0.65	1.36	0.09	0.32	0.04	
		E	0.95	1.50	-0.45	0.74	-0.63	E	0.92	1.32	0.04	0.40	0.04	
		F	1.68	1.77	-0.36	1.00	-0.67	F	1.58	1.76	0.17	0.69	0.06	
		G	2.28	2.15	-0.25	1.38	-0.70	G	2.13	1.85	0.34	1.09	0.18	
		H	1.97	2.31	0.31	1.84	-0.68	H	1.79	1.98	0.92	1.55	0.24	
		I	1.12	2.28	1.73	2.21	-0.66	I	1.17	2.12	1.61	1.94	0.36	
		J	0.65	2.08	1.12	2.48	-0.64	J	0.76	1.96	0.71	2.13	0.60	
		K	0.35	1.74	0.66	2.21	10.87	K	0.47	1.67	0.50	1.94	10.26	
		L	0.26	1.49	0.56	2.02	1.60	L	0.29	1.50	0.42	1.70	0.86	
		M	0.17	1.30	0.42	1.80	0.36	M	0.21	1.42	0.36	1.49	-0.08	
		N	0.06	1.07	0.30	1.25	0.34	N	0.05	1.00	0.19	1.03	-0.06	
		2W	--	0.74	0.20	0.76	0.30	2W	--	0.68	0.08	0.56	-0.10	
		4W	0.1	0.52	0.12	0.40	0.24	4W	--	0.63	0.04	0.24	-0.10	
		6W	0.06	0.20	0.08	0.18	0.14	6W	--	0.37	--	--	-0.16	
		8W	0.04	0.13	0.06	--	0.14	8W	--	0.36	--	-0.18	-0.16	
		10W	0.04	0.21	0.09	-0.07	0.07	10W	--	0.22	--	-0.19	-0.14	
		12W	--	0.06	0.06	-0.10	0.05	12W	--	0.30	--	-0.20	-0.14	
		14W	--	0.09	0.05	-0.13	0.03	14W	--	0.10	--	-0.20	-0.10	
		16W	--	0.09	0.05	-0.12	--	16W	--	0.28	0.04	-0.20	-0.10	
		18W	--	--	0.06	-0.10	--	18W	--	0.21	--	-0.20	-0.08	
		20W	--	--	0.05	-0.08	--	20W	--	0.30	--	-0.20	-0.08	
		22W	--	--	--	-0.05	--	22W	--	0.26	--	-0.20	-0.08	
		24W	--	--	--	-0.03	--	24W	--	0.36	--	-0.20	-0.08	
		26W	--	--	--	-0.03	--	26W	--	0.25	--	-0.20	-0.08	

Vertical Deflection, in., at Indicated Gages													
Forward, Avg Speed = 15.0 mph							Reverse, Avg Speed = 2.66 mph						
Position	Location	D ₆	D ₇	D ₈	D ₉		Position	Location	D ₆	D ₇	D ₈	D ₉	
15	1'S	26E	-0.004	-0.002	0.004		0	26E	0.002	--	--	0.002	
		24E	-0.004	-0.002	0.004		1'S	24E	0.003	--	--	0.002	
		22E	-0.003	-0.002	0.004		22E	0.005	--	--	0.002		
		20E	-0.001	-0.002	0.004		20E	0.008	--	--	0.002		
		18E	0.002	-0.002	0.004		18E	0.011	0.002	--	0.003		
		16E	0.005	-0.001	0.004		16E	0.014	0.002	0.003	--		
		14E	0.005	--	0.004		14E	0.014	0.004	0.004	--		
		12E	0.004	0.001	0.005		12E	0.011	0.004	0.005	--		
		10E	--	0.002	0.005		10E	0.008	0.006	0.007	--		
		8E	-0.002	0.003	0.009		8E	0.008	0.007	0.013	--		
		6E	-0.002	0.003	0.013		6E	0.009	0.007	0.019	--		
		4E	-0.001	0.003	0.020		4E	0.013	0.005	0.021	--		
		2E	0.004	0.001	0.023		2E	0.023	0.004	0.027	--		
		A	0.014	0.001	0.018		A	0.038	0.004	0.023	--		
		B	0.032	0.001	0.013		B	0.056	0.005	0.019	--		
		C	0.049	0.002	0.009		C	0.066	0.007	0.017	--		
		D	0.056	0.002	0.008		D	0.068	0.009	0.016	--		
		E	0.061	0.003	0.008		E	0.068	0.011	0.017	--		
		F	0.066	0.008	0.009		F	0.061	0.018	0.024	--		
		G	0.056	0.015	0.014		G	0.041	0.025	0.037	--		
		H	0.036	0.023	0.029		H	0.022	0.029	0.063	--		
		I	0.020	0.029	0.060		I	0.009	0.029	0.105	--		
		J	0.010	0.031	0.098		J	0.003	0.025	0.127	--		
		K	0.005	0.027	0.117		K	--	0.017	0.129	--		
		L	0.004	0.023	0.126		L	--	0.014	0.131	--		
		M	0.003	0.020	0.137		M	-0.001	0.010	0.128	--		
		N	0.002	0.012	0.113		N	-0.001	0.005	0.077	--		
		2W	0.001	0.007	0.068		2W	-0.001	0.002	0.040	--		
		4W	--	0.004	0.038		4W	-0.001	--	0.020	--		
		6W	--	0.002	0.021		6W	-0.001	-0.001	0.010	--		
		8W	--	0.001	0.011		8W	-0.001	-0.002	0.007	--		
		10W	--	--	0.005		10W	-0.001	-0.002	0.005	--		
		12W	--	--	0.002		12W	-0.001	-0.002	0.005	--		
		14W	--	--	0.001		14W	-0.001	-0.002	0.005	--		
		16W	--	--	0.001		16W	-0.001	-0.002	0.005	--		
		18W	--	--	--		18W	-0.001	-0.002	0.005	--		
							20W	-0.001	-0.002	0.005	--		
							22W	-0.001	-0.002	0.005	--		
							24W	-0.001	-0.002	0.005	--		
							26W	-0.001	-0.002	0.005	--		

• Not working.

(7 of 7 sheets)

Table A-19

Multiple-Wheel Heavy Gear Load Flexible Pavement Test, Dynamic Instrumentation Loading Data
 Item 4; Load Condition: 30 kips per wheel, Twin Tandem, 100 psi

Row	Position	Location	Vertical Pressure, psi, at Indicated Cell					Position	Location	Vertical Pressure, psi, at Indicated Cell				
			1	2	3	4	5			1	2	3	4	5
5	1" W	26E	--	-0.52	1.08	-0.25	--	2" W	26E	--	0.10	--	0.08	--
		24E	--	-0.44	1.08	-0.25	--		12E	--	0.24	--	0.16	--
		22E	--	-0.30	1.12	-0.19	--		20E	--	0.64	0.12	0.32	--
		20E	--	-0.08	1.12	-0.10	--		18E	--	1.08	0.36	0.48	--
		18E	--	0.20	1.20	0.10	--		16E	--	1.64	0.76	0.72	0.12
		16E	--	0.70	1.60	0.25	--		14E	--	1.84	1.60	1.00	0.33
		14E	--	1.14	2.00	0.50	0.18		12E	--	1.68	2.88	1.28	0.87
		12E	--	1.20	3.00	0.80	0.50		10E	--	1.26	2.56	1.40	1.81
		10E	--	0.82	2.88	1.00	1.09		8E	--	0.84	1.60	1.40	2.64
		8E	--	0.26	1.40	1.10	1.81		6E	--	0.76	1.20	1.20	2.43
		6E	--	--	0.40	1.08	1.90		4E	--	0.84	1.08	1.08	1.74
		4E	--	--	--	0.92	0.93		2E	--	1.24	1.00	0.96	1.18
		2E	--	0.30	--	0.80	0.10		A	--	2.16	1.20	1.20	0.85
		A	--	1.00	0.20	0.83	-0.37		B	--	3.82	1.80	1.68	0.79
		B	--	2.38	0.72	1.15	-0.47		C	--	5.90	3.92	2.52	1.05
		C	--	4.40	2.40	1.70	-0.22		D	--	6.84	7.24	3.20	1.39
		D	--	5.42	4.80	2.15	0.10		E	--	7.46	12.60	3.80	1.99
		E	--	6.40	9.24	2.80	0.55		F	--	7.90	15.76	4.88	4.13
		F	--	7.52	13.92	4.03	2.39		G	--	7.22	13.52	5.80	9.30
		O	--	7.56	12.20	5.15	7.00		H	--	5.50	19.64	6.00	11.67
		H	--	5.82	19.20	5.92	10.28		I	--	3.42	10.80	5.52	12.34
		I	--	3.46	10.84	5.95	11.66		J	--	2.00	3.20	4.48	13.36
		J	--	1.84	2.84	5.21	13.28		K	--	1.10	1.40	3.20	8.66
		K	--	0.60	0.80	3.93	8.34		L	--	0.76	0.88	2.60	5.50
		L	--	0.50	0.48	3.15	5.42		M	--	0.60	0.80	2.04	3.85
		M	--	0.30	0.40	2.53	3.43		N	--	0.30	0.60	1.28	1.82
		N	--	0.10	--	1.58	1.11		2W	--	0.10	0.60	0.64	0.91
		2W	--	--	--	0.89	0.31		4W	--	--	0.60	0.32	0.50
		4W	--	--	--	0.50	0.04		6W	--	--	0.60	0.12	0.39
		6W	--	--	--	0.28	--		8W	--	--	0.60	--	0.38
		8W	--	--	--	0.12	--		10W	--	--	0.60	--	0.38
		10W	--	--	--	0.10	--		12W	--	--	0.60	--	0.38
		12W	--	--	--	0.08	--		14W	--	--	0.60	--	0.38
		14W	--	--	--	0.08	--		16W	--	--	0.60	--	0.38
		16W	--	--	--	0.07	--		18W	--	--	0.60	--	0.38
		18W	--	--	--	0.07	--		20W	--	--	0.60	--	0.38
		20W	--	--	--	0.07	--		22W	--	--	0.60	--	0.38
		22W	--	--	--	0.07	--		24W	--	--	0.60	--	0.38
		24W	--	--	--	0.07	--		26W	--	--	0.60	--	0.38
		26W	--	--	--	0.07	--							

(Continued)

(1 of 7 sheets)

Table A7(Continued)

Pressure, psi, at Indicated Col.														
Forward, Avg Speed =								Reverse, Avg Speed =						
Row	Position	Location	1	2	3	4	5	Position	Location	1	2	3	4	5
7	1"S	26E	--	--	-0.56	--	-0.78	1"N	26E	--	0.24	--	0.04	--
		24E	--	0.24	-0.56	--	-0.66		24E	--	0.54	--	0.08	--
		22E	--	0.66	-0.48	--	-0.66		22E	--	0.99	--	0.20	--
		20E	--	1.56	-0.44	0.08	-0.66		20E	--	2.10	0.08	0.38	--
		18E	--	2.70	-0.32	0.16	-0.60		18E	--	3.45	0.36	0.48	--
		16E	0.50	4.20	--	0.52	-0.45		16E	0.30	4.92	1.20	0.80	0.06
		14E	--	6.40	0.44	1.60	-0.36		14E	--	5.40	4.52	1.04	0.45
		12E	--	4.53	0.92	5.88	0.15		12E	--	1.50	10.04	1.28	1.11
		10E	--	4.36	1.20	4.84	0.99		10E	--	3.09	4.24	1.44	2.37
		8E	--	2.10	1.16	1.92	2.67		8E	--	2.04	0.68	1.36	3.66
		6E	--	1.32	1.12	1.20	2.67		6E	--	1.65	0.28	1.20	3.00
		4E	--	1.20	0.50	0.88	1.26		4E	--	1.80	--	1.00	1.50
		2E	--	1.95	0.44	0.80	0.21		2E	--	2.91	--	1.00	0.84
		A	--	3.84	0.60	0.88	-0.30		A	--	5.16	0.20	1.20	0.48
		B	--	7.05	0.84	1.20	-0.33		B	--	9.00	0.60	1.60	0.45
		C	1.05	11.55	1.20	1.72	-0.06		C	1.10	13.86	2.36	2.40	0.63
		D	--	13.80	3.20	2.08	0.06		D	--	16.20	5.40	2.88	0.96
		E	--	16.14	8.40	3.04	0.36		E	--	17.76	11.40	3.40	1.50
		F	5.50	18.60	16.60	3.72	1.95		F	5.95	19.50	16.48	4.60	1.60
		O	--	18.96	11.60	4.84	6.30		O	--	18.00	12.00	5.28	8.37
		H	--	15.00	21.72	5.52	9.93		H	--	14.10	21.64	5.60	10.80
		I	--	9.60	13.20	5.52	11.04		I	--	9.09	10.40	5.16	11.61
		J	--	5.10	2.80	4.76	12.93		J	--	5.61	2.08	4.28	13.11
		K	--	2.55	0.64	3.52	9.24		K	--	3.21	0.48	3.00	7.59
		L	--	1.65	0.40	2.92	5.85		L	--	2.40	0.24	2.52	4.83
	1"S	M	--	1.05	0.20	2.44	3.81	1"N	M	--	1.80	--	2.04	3.06
		N	--	0.30	--	1.52	1.23		N	--	0.96	--	1.32	1.35
		2W	--	--	--	0.80	0.36		2W	--	0.60	--	0.80	0.54
		4W	--	--	--	0.40	0.06		4W	--	0.36	--	0.40	0.21
		6W	--	--	--	0.20	--		6W	--	0.30	--	0.20	--
		8W	--	--	--	--	--		8W	--	0.30	--	0.08	--
		10W	--	--	--	--	--		10W	--	0.30	--	--	--
		12W	--	--	--	--	--		12W	--	0.30	--	--	--
		14W	--	--	--	--	--		14W	--	0.30	--	--	--
		16W	--	--	--	--	--		16W	--	0.30	--	--	--
		18W	--	--	--	--	--		18W	--	0.30	--	--	--
		20W	--	--	--	--	--		20W	--	0.30	--	--	--
		22W	--	--	--	--	--		22W	--	0.30	--	--	--
		24W	--	--	--	--	--		24W	--	0.30	--	--	--
		26W	--	--	--	--	--		26W	--	0.30	--	--	--

(Continued)

(2 of 7 sheets)

Table A1 (Continued)

Vertical Pressure, psi, at Indicated Cells														
Forward, Avg Speed = 2.50 mph							Reverse, Avg Speed = 2.65 mph							
Row	Position	Location	P ₆	P ₇	P ₈	P ₉	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀	
9	1"s	24E	--	--	1.00	-0.08	-0.08	5"s	24E	--	0.13	--	0.08	-0.05
		22E	--	0.24	1.00	--	-0.07		22E	--	0.30	--	0.10	-0.05
	2"s	20E	--	0.63	1.10	0.09	-0.05		20E	--	0.58	--	0.20	-0.06
		18E	--	1.15	1.10	0.24	--		18E	--	1.06	0.10	0.32	-0.07
	2-1/2"s	16E	--	1.68	1.10	0.50	0.10		16E	--	1.70	0.30	0.54	-0.04
		14E	--	1.75	1.50	0.70	0.29		14E	--	2.30	0.60	0.85	0.49
		12E	--	1.45	1.80	0.98	0.58		12E	--	2.30	1.10	1.16	0.31
		10E	--	0.90	1.45	1.03	1.08		10E	--	1.83	1.10	1.33	0.82
		8E	--	0.43	0.90	1.07	1.64		8E	--	1.29	1.00	1.37	1.74
	3"s	6E	--	0.20	0.80	0.97	1.60		6E	--	1.08	0.80	1.26	2.19
		4E	--	0.25	0.75	0.84	0.88		4E	--	1.20	0.85	1.10	1.63
		2E	--	0.58	0.75	0.75	0.26		2E	--	1.61	0.85	1.06	1.08
		A	--	1.45	0.75	0.76	-0.13		A	--	3.07	0.95	1.22	0.76
		B	--	3.16	0.85	1.03	-0.30		B	--	5.08	1.35	1.68	0.65
		C	--	5.45	1.00	1.52	-0.16	4"s	C	--	7.52	2.80	2.50	0.78
		D	--	6.75	2.05	1.92	--		D	--	8.45	1.10	2.98	1.01
		E	--	7.86	3.50	2.40	0.33		E	--	9.10	5.50	3.57	1.39
		F	--	9.12	5.00	3.49	1.55		F	--	9.61	6.40	4.70	3.02
		O	--	9.10	4.85	4.63	4.65		O	--	8.76	6.00	5.48	6.40
		H	--	7.11	6.55	5.44	7.91		H	--	6.39	6.90	5.69	9.15
		I	--	4.50	5.65	5.68	9.06		I	--	4.09	3.90	5.33	9.72
		J	--	4.50	5.15	5.11	10.80	5"s	J	--	2.38	1.45	4.31	11.30
		K	--	1.25	0.85	4.09	8.53		K	--	1.31	0.90	3.19	8.21
		L	--	0.83	0.40	3.38	5.79		L	--	0.98	0.80	2.58	5.74
		M	--	0.58	0.30	2.84	3.87		M	--	0.72	0.80	2.12	2.54
		N	--	0.26	0.20	1.80	1.41		N	--	0.40	0.75	1.32	2.01
		2W	--	0.11	--	1.07	0.44		2W	--	0.26	0.70	0.80	1.13
		4W	--	0.07	--	0.62	0.10		4W	--	0.14	0.60	0.44	0.75
	2-1/2"s	6W	--	0.05	--	0.35	--	4"s	6W	--	0.10	0.50	0.24	0.59
		8W	--	0.05	--	0.16	-0.06		8W	--	0.10	0.50	0.10	0.54
		10W	--	0.05	--	0.10	0.05		10W	--	0.10	0.55	--	0.54
	2"s	12W	--	0.05	--	0.06	-0.04		12W	--	0.10	0.55	-0.04	0.54
		14W	--	0.05	--	0.05	-0.02		14W	--	0.10	0.55	-0.05	0.55
	1-1/2"s	16W	--	0.05	--	0.04	--		16W	--	0.10	0.55	-0.05	0.57
		18W	--	0.05	--	0.04	--		18W	--	0.10	0.55	-0.05	0.56
		20W	--	0.05	--	0.04	--		20W	--	0.10	0.55	-0.05	0.57
	1"s	22W	--	0.05	--	0.04	--		22W	--	0.10	0.55	-0.05	0.59
		24W	--	0.05	--	0.05	--		24W	--	0.10	0.55	-0.05	0.59
		26W	--	--	--	--	--		26W	--	--	--	--	--

Vertical Deflection, in., at Indicated Gages														
Forward, Avg Speed = 2.50 mph							Reverse, Avg Speed = 2.65 mph							
Position	Location	D ₁	D ₂	D ₃	D ₄	D ₅	Position	Location	D ₁	D ₂	D ₃	D ₄	D ₅	
9	1"s	24E	0.021	-0.002	-0.003	-0.010	-0.007	5"s	24E	0.001	0.005	0.003	0.001	-0.002
		22E	0.021	0.002	-0.003	-0.010	-0.007		22E	0.001	0.008	0.004	0.001	-0.002
	2"s	20E	0.021	0.010	-0.003	-0.009	-0.007		20E	0.001	0.015	0.004	0.001	-0.003
		18E	0.021	0.038	-0.003	-0.009	-0.007		18E	0.002	0.023	0.004	0.001	-0.003
	2-1/2"s	16E	0.021	0.061	-0.003	-0.007	-0.007		16E	0.002	0.039	0.004	0.004	-0.003
		14E	0.022	0.041	-0.002	-0.004	-0.007		14E	0.003	0.032	0.004	0.007	-0.003
		12E	0.023	0.031	-0.002	0.001	-0.005		12E	0.005	--	0.004	0.013	-0.003
		10E	0.025	0.025	-0.002	0.011	-0.003		10E	0.009	-0.009	0.003	0.023	--
		8E	0.029	0.022	-0.001	0.028	--		8E	0.015	-0.013	0.003	0.037	0.004
		6E	0.036	0.021	-0.001	0.031	0.007		6E	0.024	-0.011	0.003	0.031	0.011
	3"s	4E	0.040	0.024	-0.001	0.021	0.015		4E	0.034	-0.005	0.003	0.011	0.016
		2E	0.041	0.030	-0.001	0.012	0.019		2E	0.036	0.008	0.003	0.001	0.008
		A	0.035	0.042	0.001	0.006	0.015		A	0.029	0.029	0.003	-0.003	-0.006
		B	0.027	0.053	0.001	0.004	0.007		B	0.024	0.052	0.004	-0.003	-0.013
		C	0.021	0.077	--	0.005	0.003	4"s	C	0.022	0.067	0.003	0.002	-0.017
		D	0.019	0.090	--	0.007	0.001		D	0.021	0.069	0.002	0.007	-0.018
		E	0.019	0.098	--	0.011	-0.001		E	0.023	0.070	0.002	0.014	-0.016
		F	0.020	0.102	0.001	0.023	-0.004		F	0.031	0.062	0.001	0.034	-0.007
		O	0.027	0.080	0.002	0.048	-0.003		O	0.049	0.037	--	0.053	0.008
		H	0.045	0.051	0.003	0.008	0.006		H	0.082	0.011	-0.001	0.079	0.032
	I	0.075	0.029	0.004	0.050	0.025		I	0.126	-0.004	-0.001	0.031	0.058	
	J	0.120	0.025	0.005	0.104	0.046	5"s	J	0.160	-0.013	-0.003	0.078	0.069	
	K	0.139	0.007	0.006	0.091	0.064		K	0.158	-0.017	-0.003	0.047	0.070	
	L	0.151	0.004	0.006	0.071	0.070		L	0.162	-0.018	-0.004	0.049	0.067	
	M	0.167	0.003	0.006	0.055	0.073		M	0.162	-0.019	-0.004	0.017	0.061	
	N	0.140	0.002	0.006	0.050	0.061		N	0.105	-0.019	-0.004	0.001	0.056	
	2W	0.085	0.001	0.006	0.015	0.037		2W	0.057	-0.019	-0.004	-0.009	0.013	
	4W	0.050	0.001	0.005	0.008	0.018		4W	0.034	-0.019	-0.004	-0.013	0.002	
2-1/2"s	6W	0.027	0.001	0.005	0.004	0.007	4"s	6W	0.022	-0.019	-0.004	-0.014	-0.006	
	8W	0.015	0.001	0.004	0.002	0.001		8W	0.016	-0.019	-0.004	0.015	-0.009	
	10W	0.008	0.001	0.004	0.002	-0.002		10W	0.014	-0.018	-0.004	-0.015	-0.011	
2"s	12W	0.005	0.001	0.003	0.001	-0.002		12W	0.013	-0.018	-0.004	-0.015	-0.011	
	14W	0.003	0.001	0.003	0.001	-0.002		14W	0.013	-0.018	-0.004	-0.015	-0.011	
1-1/2"s	16W	0.002	0.001	0.003	0.001	-0.002		16W	0.013	-0.018	-0.004	-0.015	-0.011	
	18W	0.002	0.001	0.002	0.001	-0.002		18W	0.013	-0.018	-0.004	-0.015	-0.011	
	20W	0.001	--	0.002	0.001	-0.001		20W	0.013	-0.018	-0.004	-0.015	-0.011	
1"s	22W	--	--	0.002	0.001	-0.001		22W	0.013	-0.018	-0.004	-0.015	-0.011	
	24W	--	--	0.002	0.001	-0.001		24W	0.014	-0.018	-0.005	-0.015	-0.011	
	26W	--	--	--	--	--		26W	--	--	--	--	--	

(Continued)

(3 of 7 sheets)

Table AP9(Continued)

Vertical Pressure, psi, at Indicated Gages														
Forward, Avg Speed = 2.78 mph							Reverse, Avg Speed = 2.90 mph							
Row	Position	Location	6	7	8	9	10	Position	Location	6	7	8	9	10
10	1" W	26E	--	-0.20	-2.00	-0.14	-0.70	0	26E	--	--	--	--	-0.01
		24E	--	-0.07	-2.00	-0.08	-0.70		24E	--	0.16	--	0.08	-0.02
		22E	--	--	-2.00	-0.06	-0.68		22E	--	0.30	--	0.14	-0.01
		20E	--	0.30	-2.00	--	-0.70		20E	--	0.63	--	0.20	-0.01
		18E	--	0.79	-2.00	0.11	-0.69		18E	--	1.13	--	0.35	-0.01
		16E	2.20	1.30	-1.90	0.25	-0.63		16E	1.60	1.80	0.50	0.55	0.01
		14E	4.30	1.98	-1.80	0.49	-0.50		14E	3.10	2.31	0.80	0.80	0.12
		12E	--	2.19	--	0.70	-0.32		12E	--	2.20	2.50	1.10	0.47
		10E	--	1.68	2.10	0.90	0.10		10E	--	1.60	2.20	1.24	1.09
		8E	--	1.10	0.75	1.04	1.25		8E	--	1.07	0.60	1.29	2.57
		6E	--	0.60	-0.20	0.95	2.40		6E	--	0.85	--	1.16	2.90
		4E	--	0.58	-0.25	0.86	1.41		4E	--	0.89	--	1.00	1.47
		2E	--	0.80	-0.30	0.75	0.35		2E	--	1.50	0.30	0.94	0.75
		A	--	1.72	-0.20	0.77	-0.17		A	--	2.64	0.30	1.10	0.40
		B	1.40	3.09	-0.15	0.96	-0.32		B	2.30	3.60	0.70	1.47	0.31
		C	12.10	5.24	-0.10	1.41	-0.27		C	21.10	5.70	2.10	2.25	0.48
		D	--	6.35	0.70	1.80	-0.08		D	--	7.30	3.90	2.72	0.73
		E	--	7.20	2.50	2.22	0.16		E	--	7.82	5.80	3.25	1.10
		F	56.80	8.35	5.10	3.26	1.15		F	59.20	8.30	6.40	4.24	2.64
		G	0.70	8.40	4.20	4.30	4.20		G	0.70	7.58	5.70	4.94	6.13
H	--	6.51	7.00	4.98	7.32	H	--	5.63	7.00	5.07	8.51			
I	--	4.22	5.10	5.17	6.26	I	--	3.68	2.60	4.81	9.05			
J	--	2.31	1.80	4.61	10.08	J	--	2.15	-0.50	3.92	10.58			
K	--	1.19	0.50	3.70	8.03	K	--	1.17	-0.50	2.88	7.18			
L	--	0.82	0.30	3.	5.49	L	--	0.82	-0.60	2.40	4.93			
M	--	0.57	0.20	2.54	3.65	M	--	0.55	-0.60	1.90	3.14			
N	--	0.25	--	1.64	1.40	N	--	0.26	-0.60	1.24	1.45			
2W	--	0.16	--	0.93	0.46	2W	--	0.10	-0.50	0.74	0.59			
4W	--	--	--	0.52	0.10	4W	--	--	-0.50	0.43	0.29			
6W	--	--	--	0.27	--	6W	--	--	-0.40	0.22	0.10			
8W	--	--	--	0.13	-0.07	8W	--	--	-0.40	0.09	0.04			
10W	--	--	--	0.05	-0.08	10W	--	--	-0.40	0.02	0.04			
12W	--	--	--	--	--	12W	--	--	-0.40	--	0.04			
						14W	--	--	-0.40	--	0.06			
						16W	--	--	-0.40	--	0.07			
						18W	--	--	-0.40	--	0.08			
						20W	--	--	-0.40	--	0.09			
						22W	--	--	-0.40	--	0.10			
						24W	--	--	-0.40	--	0.10			
						26W	--	--	-0.40	--	0.10			

Vertical Deflection, in., at Indicated Gages														
Forward, Avg Speed = 2.78 mph							Reverse, Avg Speed = 2.90 mph							
Position	Location	D ₁	D ₂	D ₃	D ₄	D ₅	Position	Location	D ₁	D ₂	D ₃	D ₄	D ₅	
10	1" W	26E	-0.076	-0.073	-0.001	-0.026	-0.017	0	26E	--	0.004	0.005	0.001	--
		24E	-0.076	-0.072	-0.001	-0.027	-0.017		24E	--	0.006	0.006	0.002	--
		22E	-0.076	-0.070	-0.001	-0.027	-0.017		22E	0.001	0.011	0.006	0.002	--
		20E	-0.076	-0.066	-0.001	-0.027	-0.017		20E	0.001	0.017	0.007	0.003	--
		18E	-0.076	-0.058	-0.001	-0.027	-0.017		18E	0.001	0.027	0.008	0.004	--
		16E	-0.076	-0.050	--	-0.027	-0.017		16E	0.002	0.040	0.008	0.007	--
		14E	-0.076	-0.045	--	-0.025	-0.017		14E	0.003	0.042	0.009	0.011	--
		12E	-0.075	-0.056	--	-0.022	-0.015		12E	0.004	0.035	0.009	0.017	0.002
		10E	-0.074	-0.065	--	-0.015	-0.014		10E	0.008	0.029	0.009	0.028	0.005
		8E	-0.071	-0.070	0.001	-0.005	-0.010		8E	0.013	0.028	0.009	0.043	0.011
		6E	-0.065	-0.072	0.001	0.002	-0.005		6E	0.022	0.021	0.010	0.041	0.019
		4E	-0.054	-0.070	0.001	-0.004	0.003		4E	0.034	0.044	0.011	0.028	0.026
		2E	-0.035	-0.062	0.002	-0.014	0.006		2E	0.037	0.066	0.011	0.020	0.022
		A	-0.049	-0.040	0.002	-0.021	0.001		A	0.035	0.107	0.011	0.017	0.012
		B	-0.050	0.019	0.002	-0.023	-0.005		B	0.033	0.169	0.012	0.019	0.006
		C	-0.064	0.125	0.002	-0.023	-0.010		C	0.030	0.189	0.011	0.028	0.003
		D	-0.066	0.132	0.003	-0.019	-0.012		D	0.031	0.170	0.010	0.037	0.004
		E	-0.067	0.207	0.004	-0.015	-0.013		E	0.034	0.173	0.010	0.049	0.007
		F	-0.066	0.200	0.005	0.005	-0.014		F	0.040	0.190	0.007	0.086	0.018
		G	-0.060	0.152	0.008	0.057	-0.011		G	0.059	0.165	0.004	0.149	0.041
		H	-0.046	0.076	0.010	0.115	0.006		H	0.090	0.080	0.001	0.169	0.075
		I	-0.010	0.046	0.012	0.179	0.040		I	0.141	-0.002	-0.002	0.166	0.115
		J	0.119	0.084	0.015	0.177	0.077		J	0.189	-0.014	-0.004	0.166	0.131
		K	0.186	0.012	0.016	0.161	0.128		K	0.180	-0.018	-0.005	0.097	0.106
		L	0.117	0.008	0.016	0.125	0.119		L	0.170	-0.020	-0.005	0.061	0.128
		M	0.170	0.006	0.016	0.093	0.126		M	0.194	-0.021	-0.005	0.034	0.114
		N	0.150	0.003	0.015	0.052	0.108		N	0.083	-0.021	-0.005	0.008	0.069
		2W	0.086	0.003	0.015	0.027	0.067		2W	0.031	-0.021	-0.005	-0.003	0.088
		4W	0.047	0.002	0.014	0.014	0.037		4W	0.010	-0.021	-0.005	-0.008	0.010
		6W	0.025	0.002	0.014	0.008	0.020		6W	--	-0.020	-0.005	-0.010	--
		8W	0.014	0.001	0.013	0.005	0.010		8W	-0.007	-0.020	-0.005	-0.010	-0.005
		10W	0.008	0.001	0.012	0.003	0.005		10W	-0.010	-0.020	-0.005	-0.010	-0.007
		12W	0.005	0.001	0.011	0.003	0.004		12W	-0.010	-0.020	-0.006	-0.010	-0.007
		14W	0.003	0.001	0.011	0.002	0.003		14W	-0.010	-0.020	-0.006	-0.010	-0.007
		16W	0.002	0.001	0.010	0.002	0.003		16W	-0.010	-0.020	-0.006	-0.010	-0.007
		18W	0.002	--	0.010	0.002	0.003		18W	-0.010	-0.020	-0.006	-0.010	-0.007
		20W	0.001	--	0.009	0.002	0.003		20W	-0.010	-0.020	-0.006	-0.010	-0.007
		22W	0.001	--	0.008	0.001	0.002		22W	-0.009	-0.020	-0.006	-0.010	-0.007
		24W	--	--	0.007	0.001	0.002		24W	-0.009	-0.020	-0.006	-0.010	-0.006
		26W	--	--	0.006	0.001	0.002		26W	-0.009	-0.020	-0.006	-0.009	-0.006

(Continued)

(4 of 7 sheets)

Table A9 (Continued)

Vertical Pressure, psi, at Indicated Gages													
Forward, Avg Speed = 2.50 mph							Reverse, Avg Speed = 2.74 mph						
11	Position	Location	P ₆	P ₇	P ₈	P ₁₀	17	Position	Location	P ₆	P ₇	P ₈	P ₁₀
	17	26E	0.26	0.60	2.40	0.17	0.82		26E	--	0.07	--	--
		24E	0.27	0.67	2.45	0.20	0.82		24E	--	0.15	--	--
		22E	0.30	0.81	2.50	0.22	0.82		22E	--	0.32	--	0.07
		20E	0.30	1.06	2.50	0.30	0.82		20E	--	0.60	0.10	0.14
		18E	0.19	1.42	2.50	0.39	0.83		18E	--	1.03	0.20	0.25
		16E	0.72	1.93	2.70	0.53	0.87		16E	0.10	1.70	0.40	0.43
		14E	0.57	2.51	2.85	0.71	0.99		14E	2.83	2.11	1.25	0.63
		12E	0.15	2.58	4.10	0.92	1.19		12E	-0.30	1.92	3.30	0.87
		10E	0.22	2.19	4.65	1.07	1.57		10E	-0.18	1.22	2.27	0.99
		8E	0.28	1.68	3.35	1.17	2.76		8E	-0.15	0.70	-0.95	1.02
		6E	0.27	1.30	2.70	1.12	3.60		6E	-0.17	0.27	-1.65	0.85
		4E	0.28	1.27	2.50	1.11	2.65		4E	-0.05	0.42	-1.75	0.73
		2E	0.21	1.53	2.50	0.93	1.66		2E	--	1.86	-1.60	0.66
		A	-0.06	2.17	2.50	0.95	1.17		A	--	1.80	-1.45	0.78
		B	-0.35	3.18	2.75	1.10	1.03		B	-0.20	3.09	-0.96	1.11
		C	-0.41	4.50	2.90	1.50	1.10		C	-0.28	4.56	--	1.68
		D	-0.43	5.30	3.20	1.79	1.25		D	-0.28	5.22	0.65	2.05
		E	-0.43	5.86	3.25	2.12	1.44		E	-0.30	5.64	1.35	2.46
		F	0.40	6.51	3.05	2.86	2.13		F	-0.45	5.98	1.60	3.22
		G	-0.15	6.32	3.25	3.63	3.50		G	-0.30	5.50	1.45	3.77
		H	0.07	4.89	3.30	4.07	4.77		H	--	4.26	1.60	3.95
		I	0.10	3.21	2.10	4.18	5.51		I	--	2.88	1.50	3.76
		J	0.10	1.80	1.00	3.70	5.87		J	--	1.65	--	3.07
		K	0.07	0.87	0.45	2.90	4.31		K	--	0.89	-0.90	2.32
		L	0.05	0.61	0.30	2.48	3.20		L	--	0.60	-1.05	1.92
		M	0.03	0.40	0.20	2.04	2.12		M	--	0.41	-1.05	1.58
		N	--	0.14	0.10	1.28	0.87		N	--	0.12	-1.10	1.03
		2W	--	--	--	0.73	0.24		2W	--	--	-1.10	0.57
		4W	--	--	--	0.38	--		4W	--	-0.14	-1.10	0.28
		6W	--	--	--	0.18	-0.08		6W	--	-0.18	-1.05	0.12
		8W	--	--	--	0.07	-0.10		8W	--	-0.17	-1.00	0.01
		10W	--	--	--	--	-0.09		10W	--	-0.17	-1.00	-0.03
		12W	--	--	--	--	-0.06		12W	--	-0.16	-1.00	-0.09
		14W	--	--	--	--	-0.06		14W	--	-0.16	-1.00	-0.10
		16W	--	--	--	--	-0.05		16W	--	-0.16	-1.00	-0.10
		18W	--	--	--	--	-0.05		18W	--	-0.15	-1.00	-0.11
		20W	--	--	--	--	-0.04		20W	--	-0.15	-1.00	-0.11
		22W	--	--	--	--	--		22W	--	-0.15	-1.00	-0.11
		24W	--	--	--	--	--		24W	--	-0.15	-1.00	-0.11
		26W	--	--	--	--	--		26W	--	-0.15	-1.00	-0.10

Vertical Deflection, in., at Indicated Gages													
Forward, Avg Speed = 2.50 mph							Reverse, Avg Speed = 2.74 mph						
11	Position	Location	D ₁	D ₂	D ₃	D ₄	17	Position	Location	D ₁	D ₂	D ₃	D ₄
	17	26E	0.030	0.009	-0.008	-0.018	-0.017		26E	--	0.003	0.007	--
		24E	0.030	0.010	-0.008	-0.018	-0.017		24E	--	0.006	0.008	--
		22E	0.030	0.012	-0.008	-0.019	-0.018		22E	--	0.010	0.008	--
		20E	0.030	0.017	-0.008	-0.019	-0.018		20E	--	0.017	0.010	0.001
		18E	0.031	0.027	-0.008	-0.018	-0.018		18E	--	0.026	0.010	0.003
		16E	0.031	0.030	-0.008	-0.017	-0.018		16E	--	0.035	0.011	0.004
		14E	0.031	0.031	-0.007	-0.015	-0.017		14E	0.001	0.035	0.012	0.008
		12E	0.032	0.022	-0.007	-0.011	-0.016		12E	0.003	0.026	0.012	0.015
		10E	0.034	0.015	-0.007	-0.005	-0.015		10E	0.005	0.021	0.012	0.025
		8E	0.257	0.008	-0.006	0.003	-0.010		8E	0.011	0.019	0.013	0.035
		6E	0.042	0.006	-0.006	0.008	-0.005		6E	0.021	0.022	0.014	0.036
		4E	0.053	0.008	-0.005	0.001	0.002		4E	0.039	0.035	0.015	0.038
		2E	0.076	0.118	-0.005	-0.006	0.004		2E	0.035	0.057	0.016	0.030
		A	0.097	0.040	-0.005	-0.014	-0.001		A	-0.008	0.097	0.017	0.018
		B	0.047	0.025	-0.005	-0.017	-0.009		B	-0.018	0.151	0.017	0.021
		C	0.041	0.135	-0.005	-0.015	-0.013		C	-0.02	0.182	0.017	0.030
		D	0.040	0.147	-0.004	-0.013	-0.015		D	-0.020	0.180	0.016	0.039
		E	0.040	0.160	-0.003	-0.006	-0.017		E	-0.021	0.182	0.015	0.033
		F	0.040	0.195	-0.001	0.015	-0.018		F	-0.016	0.176	0.011	0.031
		G	0.044	0.145	0.002	0.070	-0.012		G	-0.005	0.098	0.007	0.152
		H	0.051	0.083	0.006	0.125	0.008		H	0.014	0.048	0.003	0.180
		I	0.065	0.045	0.010	0.154	0.050		I	0.035	0.024	--	0.184
		J	0.021	0.080	0.012	0.191	0.092		J	0.054	0.010	-0.002	0.179
		K	0.093	0.010	0.013	0.167	0.121		K	0.059	0.005	-0.003	0.110
		L	0.098	0.007	0.013	0.134	0.133		L	0.058	0.004	-0.004	0.073
		M	0.098	0.005	0.013	0.100	0.140		M	0.056	0.003	-0.004	0.046
		N	0.083	0.002	0.012	0.052	0.119		N	0.037	0.002	-0.004	0.016
		2W	0.053	0.002	0.011	0.326	0.072		2W	0.013	0.002	-0.004	0.002
		4W	0.050	0.001	0.010	0.013	0.038		4W	-0.003	0.002	-0.004	-0.003
		6W	0.045	0.001	0.009	0.007	0.018		6W	-0.010	0.003	-0.004	-0.005
		8W	0.009	--	0.008	0.004	0.008		8W	-0.015	0.003	-0.005	-0.006
		10W	0.004	--	0.007	0.003	0.004		10W	-0.018	0.003	-0.005	-0.006
		12W	0.002	--	0.006	0.002	0.001		12W	-0.018	0.003	-0.005	-0.006
		14W	--	--	0.006	0.002	--		14W	-0.018	0.003	-0.005	-0.006
		16W	--	--	0.005	0.002	--		16W	-0.018	0.003	-0.005	-0.006
		18W	--	--	0.005	0.002	--		18W	-0.019	0.003	-0.005	-0.006
		20W	--	--	0.004	0.001	--		20W	-0.019	0.003	-0.005	-0.006
		22W	--	--	0.004	0.001	--		22W	-0.019	0.003	-0.005	-0.006
		24W	--	--	0.003	0.001	--		24W	-0.018	0.003	-0.005	-0.006
		26W	--	--	0.003	--	--		26W	-0.018	0.003	-0.005	-0.006

(Continued)

(5 of 7 sheets)

Table A' (Continued)

Vertical Pressure, psi, at Indicated Cells														
Forward, Avg Speed = 2.73 mph							Reverse, Avg Speed = 2.61 mph							
Row	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀
13	1" S	24E	0.25	0.46	0.45	0.30	0.33	0	24E	0.10	--	--	0.06	--
		24E	0.25	0.47	0.45	0.31	0.35	22E	0.25	--	--	0.09	--	
		22E	0.25	0.60	0.45	0.31	0.35	20E	0.49	--	--	0.12	--	
		20E	0.75	0.80	0.40	0.39	0.33	18E	0.79	0.20	0.22	0.02	0.02	
		18E	0.20	1.10	0.40	0.48	0.38	16E	1.22	0.45	0.39	0.06	0.06	
		16E	--	1.45	0.60	0.59	0.41	14E	1.40	0.60	0.53	0.12	0.12	
		14E	--	1.75	0.80	0.73	0.47	12E	1.31	1.00	0.72	0.30	0.30	
		12E	0.15	1.88	1.00	0.91	0.60	10E	0.90	0.60	0.82	0.03	0.03	
		10E	0.20	1.56	0.70	1.01	0.87	8E	0.39	0.05	0.71	1.12	1.12	
		8E	0.20	1.23	0.40	1.04	1.22	6E	0.21	-0.10	0.72	1.22	1.22	
		6E	0.35	0.95	0.40	1.04	1.41	4E	0.22	-0.15	0.57	0.60	0.60	
		4E	0.20	1.00	0.50	0.95	1.03	2E	0.52	-0.10	0.52	0.12	0.12	
	1" W	2E	0.20	1.18	0.50	0.90	0.69	A	1.13	--	0.60	-0.04	-0.04	-0.04
		A	0.25	1.78	0.50	0.92	0.44	B	1.95	0.20	0.62	-0.09	-0.09	-0.09
		B	0.18	2.25	0.80	1.05	0.38	C	3.00	0.60	1.22	--	--	--
		C	0.10	3.35	1.00	1.40	0.48	D	3.50	1.00	1.52	0.06	0.06	0.06
		D	0.11	3.80	1.05	1.61	0.53	E	3.75	1.10	1.80	0.19	0.19	0.19
		E	--	4.10	1.05	1.81	0.69	F	4.00	1.40	2.32	0.61	0.61	0.61
		F	--	4.50	1.25	2.32	1.09	G	3.69	1.65	2.75	1.33	1.33	1.33
		G	0.10	4.21	1.75	2.86	1.71	H	2.82	1.00	2.92	2.06	2.06	2.06
		H	0.10	3.25	1.10	3.12	2.39	I	1.97	0.45	2.78	2.60	2.60	2.60
		I	0.10	2.30	0.50	3.12	3.02	J	1.10	--	2.31	2.40	2.40	2.40
		J	0.10	1.30	0.15	2.73	2.79	K	0.53	--	1.79	1.79	1.79	1.79
		K	0.10	0.65	--	2.15	1.98	L	0.35	--	1.52	1.41	1.41	1.41
		L	0.10	0.45	--	1.83	1.48	M	0.20	--	1.20	1.05	1.05	1.05
		M	0.10	0.30	--	1.55	1.12	N	--	--	0.60	0.42	0.42	0.42
		N	--	0.10	--	0.97	0.45	2W	-0.10	--	0.42	0.10	0.10	0.10
		2W	--	--	--	0.51	0.10	4W	-0.18	--	0.20	-0.03	-0.03	-0.03
		4W	--	--	--	0.25	--	6W	-0.20	--	0.06	-0.05	-0.05	-0.05
		6W	--	--	--	0.13	--	8W	-0.20	--	0.01	-0.06	-0.06	-0.06
		8W	--	--	--	0.08	--	10W	-0.20	--	--	-0.07	-0.07	-0.07
		10W	--	--	--	0.02	--	12W	-0.20	--	--	-0.07	-0.07	-0.07
		12W	--	--	--	--	--	14W	-0.20	--	--	-0.07	-0.07	-0.07
								16W	-0.20	--	--	-0.07	-0.07	-0.07
								18W	-0.20	--	--	-0.07	-0.07	-0.07
								20W	-0.20	--	--	-0.07	-0.07	-0.07
								22W	-0.20	--	--	-0.07	-0.07	-0.07
								24W	-0.20	--	--	-0.07	-0.07	-0.07
								26W	--	--	--	--	--	--

Vertical Deflection, in., at Indicated Gages													
Forward, Avg Speed = 2.73 mph							Reverse, Avg Speed = 2.61 mph						
Position	Location	D ₆	D ₇	D ₈	D ₉		Position	Location	D ₆	D ₇	D ₈	D ₉	
13	1" S	24E	-0.028	0.007	--	-0.006	0	24E	0.006	--	--	--	
		24E	-0.028	0.007	--	-0.006	22E	0.009	--	--	--	--	
		22E	-0.028	0.008	--	-0.006	20E	0.015	--	--	--	--	
		20E	-0.022	0.007	--	-0.006	18E	0.022	--	--	--	--	
		18E	-0.015	0.006	--	-0.006	16E	0.045	--	--	--	--	
		16E	-0.009	0.006	--	-0.006	14E	0.045	--	--	--	0.001	
		14E	-0.004	0.005	--	-0.006	12E	0.092	--	--	--	0.004	
		12E	-0.016	0.005	--	-0.005	10E	0.033	-0.001	--	--	0.007	
		10E	-0.027	0.002	--	-0.004	8E	0.030	-0.002	--	--	0.014	
		8E	-0.034	0.001	--	--	6E	0.035	-0.002	--	--	0.022	
		6E	-0.035	0.001	--	0.004	4E	0.046	-0.001	--	--	0.028	
		4E	-0.033	0.001	--	0.011	2E	0.072	--	--	--	0.025	
	1" W	2E	-0.025	0.002	--	0.015	A	0.113	0.001	--	--	0.015	
		A	-0.002	0.003	--	0.009	B	0.180	0.007	--	--	0.010	
		B	0.054	0.004	--	0.003	C	0.195	0.013	--	--	0.006	
		C	0.143	0.006	--	-0.003	D	0.180	0.021	--	--	0.009	
		D	0.136	0.010	--	-0.004	E	0.180	0.028	--	--	0.010	
		E	0.209	0.014	--	-0.005	F	0.198	0.030	--	--	0.020	
		F	0.202	0.025	--	-0.002	G	0.077	0.028	--	--	0.040	
		G	0.150	0.035	--	0.006	H	0.096	0.030	--	--	0.070	
		H	0.085	0.035	--	0.024	I	0.015	0.017	--	--	0.109	
		I	0.045	0.030	--	0.058	J	0.025	0.005	--	--	0.119	
		J	0.020	0.011	--	0.094	K	--	--	--	--	0.077	
		K	0.010	0.003	--	0.127	L	-0.001	--	--	--	0.116	
		L	0.008	0.002	--	0.125	M	-0.002	--	--	--	0.106	
		M	0.005	0.001	--	0.127	N	-0.001	0.002	--	--	0.095	
		N	0.003	--	--	0.105	2W	-0.002	0.005	--	--	0.025	
		2W	0.003	--	--	0.059	4W	-0.002	0.006	--	--	0.005	
		4W	0.001	--	--	0.030	6W	--	0.005	--	--	-0.002	
		6W	0.001	--	--	0.015	8W	--	0.005	--	--	-0.005	
		8W	--	--	--	0.008	10W	--	0.005	--	--	-0.005	
		10W	--	--	--	0.004	12W	--	0.005	--	--	-0.005	
		12W	--	--	--	0.003	14W	--	0.005	--	--	-0.005	
		14W	--	--	--	0.002	16W	--	0.005	--	--	-0.005	
		16W	--	--	--	0.002	18W	--	0.006	--	--	-0.005	
		18W	--	--	--	0.002	20W	--	0.007	--	--	-0.005	
		20W	--	--	--	0.002	22W	--	0.007	--	--	-0.005	
		22W	--	--	--	0.002	24W	--	0.008	--	--	-0.005	
		24W	--	--	--	0.002	26W	--	--	--	--	--	

(Continued)

* Not working.
 ** Out.

(6 of 7 sheets)

Table #9(Continued)

Vertical Pressure, psi, at Indicated Cells														
Forward, Avg Speed = 2.56 mph								Reverse, Avg Speed = 2.73 mph						
Row	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀
15	1"s	24E	0.10	0.35	--	0.30	0.08	0	24E	--	0.10	--	0.06	--
		22E	0.10	0.49	--	0.31	0.09		22E	--	0.30	--	0.10	--
		20E	0.10	0.60	--	0.34	0.09		20E	--	0.45	--	0.17	--
		18E	0.10	0.72	--	0.40	0.09		18E	--	0.65	0.05	0.23	--
		16E	0.10	0.90	--	0.47	0.10		16E	--	0.88	0.10	0.32	0.01
		14E	0.10	1.05	--	0.57	0.13		14E	--	1.00	0.25	0.45	0.10
		12E	0.10	1.09	--	0.69	0.19		12E	--	0.90	0.20	0.55	0.15
		10E	0.10	0.96	--	0.75	0.29		10E	--	0.72	0.05	0.62	0.32
		8E	0.10	0.79	--	0.80	0.40		8E	--	0.45	--	0.59	0.46
		6E	0.10	0.68	--	0.80	0.42		6E	0.09	0.32	--	0.52	0.45
		4E	0.10	0.69	--	0.70	0.33		4E	0.10	0.35	--	0.47	0.35
		2E	--	0.87	--	0.74	0.22		2E	0.11	0.52	--	0.30	0.15
		A	--	1.22	--	0.75	0.15		A	0.15	0.96	0.05	0.45	0.08
		B	--	1.74	--	0.89	0.11		B	0.10	1.49	0.20	0.62	0.05
		C	--	2.25	0.25	1.09	0.20		C	--	2.11	0.40	0.89	0.06
		D	5.85	2.50	0.25	1.23	0.25		D	2.39	2.35	0.50	1.09	0.11
		E	11.70	2.83	0.35	1.41	0.31		E	13.10	2.60	0.60	1.23	0.20
		F	--	2.95	0.60	1.75	0.54		F	--	2.72	1.10	1.60	0.41
		G	--	2.77	1.65	2.01	0.88		G	--	2.55	1.40	1.84	0.78
		H	--	2.19	0.90	2.22	1.37		H	--	2.05	0.30	1.99	1.25
		I	--	1.51	0.30	2.15	1.83		I	--	1.44	--	1.90	1.73
		J	--	0.92	0.10	1.92	1.64		J	--	0.90	-0.15	1.63	1.43
		K	--	0.50	--	1.51	1.02		K	--	0.55	-0.25	1.29	1.00
		L	--	0.39	--	1.32	0.79		L	--	0.40	-0.25	1.10	0.75
		M	--	0.29	--	1.12	0.55		M	--	0.32	-0.25	0.96	0.58
		N	--	0.19	--	0.71	0.21		N	--	0.19	-0.15	0.76	0.30
		2W	--	0.12	--	0.45	0.09		2W	--	0.08	-0.05	0.38	0.11
		4W	--	--	--	0.22	--		4W	--	0.05	--	0.20	0.02
		6W	--	--	--	0.10	--		6W	--	0.05	--	0.10	--
		8W	--	--	--	0.05	--		8W	--	0.05	--	0.05	--
		10W	--	--	--	0.02	--		10W	--	0.05	--	0.01	--
		12W	--	--	--	--	--		12W	--	0.05	--	--	--
		14W	--	--	--	--	--		14W	--	0.05	--	--	--
		16W	--	--	--	--	--		16W	--	0.05	--	--	--
		18W	--	--	--	--	--		18W	--	0.05	--	--	--
		20W	--	--	--	--	--		20W	--	0.05	--	--	--
		22W	--	--	--	--	--		22W	--	0.05	--	--	--
		24W	--	--	--	--	--		24W	--	0.05	--	--	--
		26W	--	--	--	--	--		26W	--	--	--	--	--

Vertical Deflection, in., at Indicated Gages												
Forward, Avg Speed = 2.56 mph						Reverse, Avg Speed = 2.73 mph						
Position	Location	D ₆	D ₇	D ₈	D ₉	Position	Location	D ₆	D ₇	D ₈	D ₉	
15	1"s	24E	--	0.001	-0.016	0	24E	0.004	--	--	--	
		22E	--	0.001	-0.016		22E	0.008	--	--	--	
		20E	0.005	0.001	-0.016		20E	0.015	--	--	--	
		18E	0.011	0.001	-0.016		18E	0.025	--	--	0.001	
		16E	0.020	--	-0.016		16E	0.033	--	--	0.002	
		14E	0.024	-0.001	-0.016		14E	0.032	--	--	0.001	
		12E	0.015	-0.004	-0.015		12E	0.024	-0.001	--	0.002	
		10E	0.006	-0.005	-0.013		10E	0.017	-0.005	--	0.009	
		8E	0.001	-0.005	-0.010		8E	0.017	-0.004	--	0.005	
		6E	--	-0.004	-0.005		6E	0.015	-0.003	--	0.021	
		4E	0.001	-0.002	0.002		4E	0.033	-0.003	--	0.025	
		2E	0.012	-0.001	0.004		2E	0.056	-0.002	--	0.021	
		A	0.033	--	--		A	0.095	--	--	0.020	
		B	0.081	--	-0.007		B	0.150	0.008	--	0.016	
		C	0.130	0.003	-0.011		C	0.176	0.014	--	0.013	
		D	0.145	0.005	-0.012		D	0.176	0.016	--	0.016	
		E	0.161	0.010	-0.012		E	0.176	0.023	--	0.018	
		F	0.196	0.020	-0.009		F	0.119	0.035	--	0.027	
		G	0.150	0.029	--		G	0.092	0.036	--	0.048	
		H	0.086	0.034	0.021		H	0.045	0.029	--	0.021	
		I	0.050	0.005	0.057		I	0.020	0.014	--	0.118	
		J	0.024	0.004	0.096		J	0.008	0.002	--	0.135	
		K	0.011	--	0.120		K	0.002	-0.001	--	0.136	
		L	0.008	-0.001	0.130		L	0.001	-0.005	--	0.130	
		M	0.006	-0.002	0.132		M	--	-0.005	--	0.118	
		N	0.004	-0.003	0.109		N	--	-0.003	--	0.075	
		2W	0.002	-0.003	0.082		2W	--	--	--	0.033	
		4W	0.001	-0.003	0.031		4W	--	0.001	--	0.011	
		6W	0.001	-0.003	0.013		6W	--	0.002	--	0.002	
		8W	--	-0.003	0.005		8W	--	0.002	--	--	
		10W	--	-0.001	0.001		10W	--	0.002	--	--	
		12W	--	-0.001	0.001		12W	--	0.002	--	--	
		14W	--	-0.001	--		14W	--	0.002	--	--	
		16W	--	-0.001	--		16W	--	0.002	--	--	
		18W	--	-0.001	--		18W	--	0.002	--	--	
		20W	--	--	--		20W	--	0.002	--	--	
		22W	--	--	--		22W	--	0.002	--	--	
		24W	--	--	--		24W	--	0.002	--	--	
		26W	--	--	--		26W	--	--	--	--	

* Not working.
 -- Out.

(7 of 7 sheets)

Table A-20

Multiple-Wheel Heavy Gear Load Flexible Pavement Test, Dynamic Instrumentation Loading Data
 Item 3; Load Condition: 30 kips per wheel, 12 wheels, 100 psi

Vertical Pressure, psi, at Indicated Cells															
Forward, Avg Speed = 1.91 mph						Reverse, Avg Speed = 1.94 mph									
Row	Position	Location	P ₁	P ₂	P ₃	P ₄	P ₅	Position	Location	P ₁	P ₂	P ₃	P ₄	P ₅	
5	0	12E	0.90	--	2.40	--	--	None ↓ 1" N ↓ 0 ↓ None	12E	0.15	0.41	--	0.15	--	
		10E	0.90	0.10	2.40	--	--		10E	0.15	0.50	--	0.15	--	
		8E	1.65	0.10	2.43	--	--		8E	0.30	0.57	--	0.15	--	
		6E	1.20	0.25	2.43	0.10	--		--	6E	0.35	0.70	--	0.15	--
		4E	1.50	0.41	2.43	0.10	--		--	4E	0.57	1.05	--	0.20	--
		2E	2.55	0.85	2.55	0.19	--		--	2E	0.93	1.51	--	0.25	--
		A	4.20	1.55	2.55	0.32	--		--	A	2.76	2.45	--	0.45	--
		B	5.10	2.40	2.85	0.65	--		--	B	6.45	3.42	0.24	0.72	--
		C	13.80	3.55	3.45	1.25	--		--	C	10.50	4.85	0.96	1.40	--
		D	15.00	4.25	4.05	1.49	--		--	D	10.50	5.40	2.04	1.81	--
		E	15.00	4.90	5.40	1.95	--		--	E	10.20	6.00	3.90	2.55	--
		F	15.90	6.68	10.60	3.30	--		--	F	10.65	6.80	9.45	4.20	--
		G	16.80	7.90	10.20	5.00	--		--	G	10.65	7.30	7.95	5.95	--
		H	10.20	7.21	9.00	6.45	--		--	H	6.30	7.15	7.80	7.00	--
		I	4.20	6.80	12.15	7.10	--		--	I	2.70	6.40	10.65	7.50	--
		J	2.40	5.85	4.75	7.55	--		--	J	1.95	5.52	5.10	7.15	--
		K	3.00	5.10	1.80	6.20	--		--	K	3.00	5.05	1.65	5.51	--
		L	4.20	4.85	1.20	5.25	--		--	L	4.20	4.95	1.05	4.70	--
		M	6.60	4.70	0.75	4.35	--		--	M	6.00	5.05	0.75	3.90	--
		N	12.90	3.00	0.90	3.05	--		--	N	10.05	5.58	0.90	3.00	--
		2W	15.00	5.75	3.00	2.75	--		--	2W	10.20	6.33	3.45	3.25	--
		4W	15.00	6.70	9.30	3.60	--		--	4W	10.20	6.95	9.45	4.45	--
		6W	16.20	7.25	9.90	5.20	--		--	6W	10.20	7.10	3.55	6.15	--
		8W	11.10	7.30	5.10	6.60	--		--	8W	6.60	6.75	7.50	6.95	--
		10W	4.50	6.70	10.80	7.40	--		--	10W	3.00	5.75	10.50	7.30	--
		12W	1.50	5.40	7.50	7.70	--		--	12W	1.20	4.45	6.15	7.10	--
		14W	0.60	3.90	1.95	6.40	--		--	14W	0.30	3.00	2.25	5.39	--
		16W	--	2.60	0.45	4.30	--		--	16W	-0.30	2.05	1.20	3.80	--
		18W	--	1.70	0.15	2.50	--		--	18W	-0.30	1.15	0.60	2.25	--
		20W	--	0.85	--	1.20	--		--	20W	-0.30	0.55	0.45	1.25	--
		22W	--	0.50	--	0.65	--		--	22W	-0.30	0.20	0.45	0.70	--
		24W	--	0.25	--	0.30	--		--	24W	-0.30	0.02	0.30	0.35	--
		26W	--	0.10	--	--	--		--	26W	-0.30	--	0.30	0.10	--

(Continued)

(1 of 7 sheets)

Table A20(Continued)

Vertical Pressure, psi, at Indicated Cells													
Forward, Avg Speed = 1.60 mph							Reverse, Avg Speed = 1.36 mph						
Row	Position	Location	P ₁	P ₂	P ₃	P ₄	Position	Location	P ₁	P ₂	P ₃	P ₄	P ₅
7	1"S	24E	--	0.10	--	--	2"S	26E	--	0.07	--	--	--
		22E	--	0.12	--	--		24E	--	0.10	--	--	--
		20E	--	0.20	--	0.02		22E	--	0.18	--	--	--
		18E	--	0.26	--	0.04		20E	--	0.21	--	--	--
		16E	--	0.27	--	0.05		18E	--	0.30	--	0.05	--
		14E	--	0.27	--	0.08		16E	--	0.32	--	0.05	--
		12E	--	0.27	--	0.10		14E	--	0.37	--	0.08	--
		10E	--	0.27	--	0.09		12E	--	0.38	--	0.08	--
		8E	--	0.29	--	0.07		10E	0.15	0.42	--	0.09	--
		6E	--	0.38	--	0.04		8E	0.15	0.51	--	0.10	--
	2"S	4E	0.30	0.62	--	0.05		6E	0.36	0.69	0.09	0.11	--
		2E	0.75	1.05	--	0.10		4E	0.54	1.00	0.15	0.12	--
		A	2.07	1.62	--	0.25		2E	1.14	1.50	0.15	0.19	--
		B	4.65	2.49	0.27	0.52		A	2.55	2.27	0.15	0.30	--
		C	9.30	3.75	0.90	1.06		B	6.30	3.30	0.15	0.53	--
		D	9.90	4.28	1.50	1.37		C	10.50	9.55	0.90	1.01	--
		E	9.93	5.04	3.90	1.89		D	10.80	5.27	2.25	1.41	--
		F	11.70	6.19	14.43	3.09		E	10.20	5.98	6.00	2.00	--
		O	13.44	6.85	12.96	4.49		F	12.00	6.88	16.80	3.35	--
		H	8.16	7.17	10.38	5.85		G	11.85	7.25	10.86	4.81	--
	1"S	I	3.00	6.63	19.35	7.08		H	6.45	7.10	12.00	5.70	78.00
		J	1.50	5.79	9.48	7.45		I	2.70	6.38	18.60	6.27	--
		K	1.56	4.90	1.65	5.89		J	1.95	5.59	6.93	6.09	--
		L	2.25	4.72	0.60	5.00		K	2.70	4.99	1.50	4.65	66.00
		M	3.96	4.65	0.30	4.22		L	3.90	4.95	0.90	3.90	6.00
		N	8.70	4.90	0.30	3.00		M	5.85	4.99	0.30	3.18	--
		2W	10.50	5.60	1.56	2.57		N	10.50	5.52	0.90	2.45	--
		4W	11.10	6.53	12.06	3.27		2W	10.50	6.33	4.20	4.60	--
		6W	13.20	7.10	15.06	4.69		4W	11.25	7.00	15.75	3.51	--
		8W	9.75	7.26	9.81	6.10		6W	12.24	7.18	12.66	4.85	--
	0	10W	3.33	6.60	18.60	7.12		8W	7.26	6.88	11.10	5.65	69.60
		12W	1.20	5.31	13.38	7.59		10W	3.00	5.92	19.50	6.18	--
		14W	0.45	3.98	3.00	6.50		12W	1.35	4.60	8.25	6.01	--
		16W	0.15	2.59	0.45	4.21		14W	0.54	3.21	2.10	4.60	73.80
		18W	0.15	1.62	0.15	2.61		16W	0.15	2.13	0.90	3.08	--
		20W	--	0.97	--	1.42		18W	--	1.37	0.30	1.90	--
		22W	--	0.55	--	0.75		20W	--	0.72	--	1.09	--
		24W	--	0.27	--	0.31		22W	--	0.39	--	0.62	--
		26W	--	0.15	--	0.10		24W	--	0.12	--	0.30	--
								26W	--	0.09	--	0.10	--

(Continued)

(2 of 7 sheets)

Table 88(Continued)

Vertical Pressure, psi, at Indicated Cells														
Forward, Avg Speed = 2.0 mph							Reverse, Avg Speed = 1.6 mph							
Row	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀
9	1" W	12E	0.90	0.23	2.60	0.20	0.70	3-1/2" S	12E	--	0.35	--	0.30	--
		10E	0.90	0.23	2.60	0.30	0.60	10E	--	0.40	--	0.30	--	
		8E	1.00	0.30	2.60	0.30	0.80	8E	--	0.40	--	0.30	--	
		6E	1.00	3.50	2.60	0.30	0.80	6E	--	0.45	--	0.30	--	
		4E	1.00	0.60	2.60	0.30	0.80	4E	--	0.75	--	0.30	--	
		2E	1.60	8.50	2.40	0.50	0.80	2E	0.75	1.15	--	0.40	--	
		A	2.80	1.35	2.40	0.70	0.80	A	2.00	1.75	--	0.90	--	
		B	5.80	2.05	2.30	1.00	0.80	B	5.50	2.55	0.10	1.00	--	
		C	10.30	2.90	2.40	1.80	0.80	C	10.00	3.64	0.70	1.80	--	
		D	11.30	3.45	2.80	2.40	0.80	D	10.30	4.15	1.50	2.50	--	
		E	11.50	4.05	3.80	3.00	0.80	E	10.00	4.70	3.50	3.30	--	
		F	12.00	5.00	7.00	4.70	0.80	F	10.50	5.50	6.20	5.40	--	
		O	13.40	5.60	6.80	6.60	0.50	O	11.00	5.80	4.90	7.50	--	
		H	8.50	5.75	7.00	8.20	0.20	H	5.75	5.75	5.00	8.60	--	
		I	3.70	5.45	8.80	9.10	--	I	3.00	5.25	5.20	9.20	0.10	
		J	2.00	4.75	5.60	9.10	--	J	1.75	4.55	2.50	8.50	--	
		K	2.00	4.25	2.00	7.10	--	K	4.25	4.15	0.50	6.50	--	
		L	3.00	4.05	1.30	6.10	--	L	3.25	4.05	0.30	5.50	--	
		M	5.00	3.95	0.80	5.10	--	M	5.00	4.15	0.30	4.50	--	
		N	10.00	4.15	0.70	3.60	--	N	9.50	4.35	0.90	3.70	--	
		2W	12.00	4.80	2.40	3.70	--	2W	10.00	4.90	2.70	4.00	--	
		4W	11.60	5.30	5.80	4.80	--	4W	9.50	5.50	5.00	5.40	0.10	
		6W	13.00	5.85	6.80	6.60	--	6W	11.00	5.65	5.30	7.20	--	
		8W	9.20	5.90	6.00	8.20	--	8W	7.50	5.55	4.60	8.40	--	
		10W	3.80	5.35	7.50	9.20	--	10W	3.50	4.95	6.20	8.80	0.20	
		12W	1.60	4.35	6.00	9.00	--	12W	1.25	3.95	3.40	8.46	--	
		14W	0.80	3.30	1.80	7.30	--	14W	0.50	2.95	0.80	6.90	--	
		16W	0.60	2.25	0.80	4.90	--	16W	-0.50	2.05	0.40	4.70	0.20	
		18W	0.40	1.50	0.50	3.00	--	18W	-0.75	1.25	0.20	3.00	0.30	
		20W	--	0.80	0.30	1.70	--	20W	-0.75	0.70	--	1.70	0.30	
		22W	--	0.50	0.20	0.80	--	22W	-0.75	0.35	--	0.86	0.30	
		24W	--	0.30	--	0.40	--	24W	-0.75	0.15	--	0.36	0.30	
		26W	--	1.50	--	0.20	--	26W	-0.75	0.10	--	--	0.30	

Vertical Deflection, in., at Indicated Gages														
Forward, Avg Speed = 2.0 mph							Reverse, Avg Speed = 1.6 mph							
Position	Location	D ₁	D ₂	D ₃	D ₄	D ₅	Position	Location	D ₁	D ₂	D ₃	D ₄	D ₅	
9	1" W	12E	0.030	-0.007	-0.010	-0.007	0.024	3-1/2" S	12E	0.005	0.002	0.003	--	0.002
		10E	0.030	-0.006	-0.009	-0.007	0.023	10E	0.010	0.003	0.004	--	0.003	
		8E	0.032	-0.005	-0.009	-0.007	0.023	8E	0.013	0.007	0.005	--	0.004	
		6E	0.038	-0.002	-0.009	-0.007	0.023	6E	0.020	0.013	0.008	--	0.005	
		4E	0.048	0.008	-0.007	-0.007	0.023	4E	0.038	0.021	0.012	0.002	0.005	
		2E	0.070	0.015	-0.004	-0.006	0.023	2E	0.065	0.035	0.019	0.002	0.005	
		A	0.090	0.030	0.004	-0.005	0.022	A	0.010	0.048	0.032	0.003	0.008	
		B	0.105	0.042	0.016	-0.003	0.023	B	0.105	0.055	0.050	0.007	0.010	
		C	0.115	0.054	0.048	0.001	0.024	C	0.108	0.060	0.061	0.012	0.015	
		D	0.123	0.058	0.060	0.003	0.025	D	0.110	0.060	0.066	0.016	0.017	
		E	0.125	0.059	0.065	0.006	0.023	E	0.105	0.055	0.060	0.019	0.014	
		F	0.100	0.048	0.081	0.012	0.038	F	0.700	0.066	0.105	0.084	0.039	
		O	0.065	0.032	0.112	0.020	0.055	O	0.043	0.024	0.093	0.088	0.063	
		H	0.043	0.022	0.092	0.027	0.075	H	0.033	0.016	0.052	0.030	0.086	
		I	0.036	0.020	0.050	0.028	0.090	I	0.040	0.024	0.030	0.026	0.101	
		J	0.070	0.027	0.030	0.025	0.110	J	0.063	0.030	0.023	0.020	0.122	
		K	0.080	0.038	0.025	0.018	0.113	K	0.098	0.042	0.028	0.014	0.120	
		L	0.096	0.044	0.026	0.016	0.128	L	0.105	0.046	0.035	0.012	0.086	
		M	0.103	0.048	0.032	0.014	0.100	M	0.104	0.049	0.046	0.011	0.063	
		N	0.110	0.057	0.057	0.010	0.062	N	0.100	0.054	0.050	0.012	0.039	
		2W	0.123	0.064	0.077	0.014	0.040	2W	0.100	0.053	0.080	0.016	0.030	
		4W	0.100	0.054	0.086	0.019	0.035	4W	0.093	0.034	0.088	0.021	0.036	
		6W	0.065	0.036	0.114	0.024	0.043	6W	0.098	0.016	0.090	0.024	0.052	
		8W	0.035	0.021	0.105	0.029	0.063	8W	0.015	0.003	0.061	0.028	0.082	
		10W	0.020	0.012	0.058	0.030	0.080	10W	0.005	-0.004	0.019	0.024	0.090	
		12W	0.010	0.006	0.031	0.028	0.098	12W	--	-0.007	0.002	0.017	0.108	
		14W	0.005	0.003	0.018	0.020	0.138	14W	-0.005	-0.009	-0.006	0.009	0.119	
		16W	0.003	0.002	0.010	0.013	0.108	16W	-0.008	-0.009	-0.010	0.003	0.050	
		18W	--	0.001	0.006	0.007	0.065	18W	-0.008	-0.009	-0.002	-0.002	-0.032	
		20W	--	--	0.004	0.003	0.038	20W	-0.008	-0.009	-0.013	-0.005	0.013	
		22W	--	--	0.003	0.002	0.020	22W	-0.008	-0.009	-0.014	-0.006	--	
		24W	--	--	0.002	--	0.018	24W	-0.008	-0.009	-0.014	-0.006	-0.005	
		26W	--	--	0.002	--	0.008	26W	-0.005	-0.009	-0.014	-0.006	-0.005	

(Continued)

(3 of 7 sheets)

Table A20(Continued)

Vertical Pressure, psi, at Indicated Cells														
Forward, Avg Speed = 1.85 mph							Reverse, Avg Speed = 1.42 mph							
Row	Position	Location	6	7	8	9	10	Position	Location	6	7	8	9	10
10	1" N	12E	0.40	0.03	0.10	0.60	1.25	3-1/2" N	12E	--	0.30	--	0.30	--
		10E	0.40	0.03	--	0.56	1.00		10E	0.10	0.32	0.10	0.30	--
		8E	0.40	0.03	--	0.56	1.00		8E	0.16	0.32	0.10	0.30	--
		6E	0.40	0.04	--	0.50	1.00		6E	0.20	0.47	0.10	0.30	--
		4E	0.80	0.60	--	0.50	1.00		4E	0.36	0.65	0.10	0.30	--
	1-1/2" N	2E	1.00	0.88	--	0.60	1.00		2E	0.80	1.00	0.10	0.42	--
		A	2.20	1.42	-0.05	0.76	1.00		A	2.00	1.55	--	0.60	--
		B	5.00	2.05	-0.10	1.24	1.00		B	5.40	2.38	0.10	1.00	--
		C	9.20	2.90	-0.05	2.00	1.00		C	10.00	3.35	0.50	1.80	--
		D	9.50	3.42	--	3.50	1.00		D	10.50	3.85	1.40	1.34	--
	2" N	F	9.70	3.95	1.00	3.24	1.00		E	10.20	4.29	3.30	3.03	--
		F	12.00	4.75	5.40	4.50	0.75		F	11.90	5.05	6.90	4.96	0.25
		O	14.50	5.40	5.30	6.16	0.75		O	13.00	5.37	4.30	6.90	0.75
		N	8.90	5.55	5.30	7.70	28.00		N	5.80	5.45	5.70	5.25	34.50
		I	4.00	5.25	8.20	8.70	4.75		I	3.00	5.00	6.50	8.90	1.75
	1-1/2" N	J	1.80	4.75	5.00	8.70	2.25		J	1.80	4.37	1.00	8.30	2.50
		K	1.70	4.20	0.90	7.00	34.50		K	2.30	3.97	-0.50	6.50	33.25
		L	2.40	4.05	0.20	6.00	15.50		L	3.30	3.95	-0.30	5.40	10.25
		M	4.00	4.02	-0.30	5.04	1.75		M	5.00	3.97	-0.20	4.60	--
		N	5.90	4.20	-0.70	3.90	0.75		N	9.80	4.25	0.30	3.80	--
	2" N	2W	11.30	4.13	--	3.60	0.75		2W	10.20	4.70	2.50	4.10	--
		4W	11.90	5.27	5.00	4.40	0.50		4W	11.00	5.25	4.80	5.40	0.25
		6W	12.60	5.65	6.70	6.24	--		6W	13.10	5.55	4.40	7.10	0.75
		8W	11.50	5.73	5.20	7.30	20.75		8W	8.20	5.28	5.30	8.20	32.50
		10W	4.70	5.21	8.20	8.80	12.25		10W	3.50	4.55	4.70	9.70	3.50
	1-1/2" N	12W	1.90	4.45	6.70	8.90	0.75		12W	1.30	1.59	1.10	8.10	2.50
		14W	0.80	3.28	1.50	7.10	33.00		14W	0.30	2.60	-0.70	6.30	37.50
		16W	0.40	2.31	0.60	4.90	4.00		16W	-3.00	1.78	-0.70	4.30	1.75
		18W	0.20	1.52	0.30	2.90	0.50		18W	-0.50	1.05	-0.70	2.70	0.25
		20W	--	0.55	0.10	1.70	0.25		20W	-0.60	0.60	-0.70	1.60	0.25
	2" N	22W	--	0.57	0.10	0.90	--		22W	-0.70	0.35	-0.70	0.90	0.25
		24W	--	0.35	--	0.40	--		24W	-0.70	0.10	-0.70	0.40	0.25
		26W	--	0.20	--	0.24	--		26W	-0.70	--	-0.70	0.20	0.25

Vertical Deflection, in., at Indicated Gages														
Forward, Avg Speed = 1.85 mph							Reverse, Avg Speed = 1.42 mph							
Position	Location	D ₁	D ₂	D ₃	D ₄	D ₅	Position	Location	D ₁	D ₂	D ₃	D ₄	D ₅	
10	1" N	12E	-0.035	-0.007	-0.014	-0.004	-0.027	3-1/2" N	12E	0.003	0.003	0.003	0.001	--
		10E	-0.035	-0.005	-0.013	-0.004	-0.027		10E	0.006	0.005	0.003	0.001	0.001
		8E	-0.033	-0.004	-0.013	-0.004	-0.027		8E	0.010	0.009	0.004	0.001	0.001
		6E	-0.027	0.001	-0.011	-0.004	-0.027		6E	0.020	0.016	0.007	0.001	0.002
		4E	-0.023	0.009	-0.011	-0.004	-0.027		4E	0.036	0.029	0.012	0.002	0.003
	1-1/2" N	2E	-0.003	0.012	-0.006	-0.003	-0.027		2E	0.075	0.046	0.021	0.003	0.004
		A	0.090	0.037	0.003	-0.002	-0.027		A	0.165	0.059	0.039	0.006	0.006
		B	0.097	0.052	0.023	0.001	-0.025		B	0.103	0.065	0.073	0.010	0.010
		C	0.083	0.061	0.060	0.004	-0.027		C	0.113	0.066	0.106	0.016	0.016
		D	0.105	0.064	0.076	0.007	-0.020		D	0.141	0.064	0.109	0.021	0.022
	2" N	E	0.143	0.064	0.081	0.011	-0.018		E	0.600	0.059	0.104	0.025	0.028
		F	0.100	0.053	0.084	0.019	-0.008		F	0.052	0.042	0.109	0.032	0.051
		O	0.053	0.036	0.109	0.026	0.015		O	0.026	0.029	0.110	0.035	0.088
		N	0.025	0.025	0.092	0.032	0.083		N	0.023	0.024	0.064	0.036	0.127
		I	0.019	0.024	0.050	0.034	0.085		I	0.031	0.029	0.032	0.032	0.104
	1-1/2" N	J	0.025	0.027	0.028	0.030	0.054		J	0.056	0.041	0.018	0.025	0.126
		K	0.093	0.047	0.014	0.023	0.141		K	0.130	0.054	0.035	0.019	0.128
		L	0.145	0.054	0.028	0.020	0.120		L	0.155	0.057	0.045	0.016	0.077
		M	0.135	0.059	0.036	0.018	0.095		M	0.101	0.058	0.059	0.016	0.050
		B	0.105	0.066	0.072	0.016	0.050		B	0.090	0.058	0.093	0.018	0.030
	2" N	2W	0.170	0.069	0.102	0.018	0.086		2W	0.150	0.052	0.093	0.023	0.024
		4W	0.105	0.059	0.101	0.022	0.020		4W	0.037	0.033	0.092	0.028	0.036
		6W	0.075	0.040	0.115	0.025	0.030		6W	--	0.016	0.094	0.032	0.066
		8W	0.040	0.024	0.107	0.035	0.093		8W	-0.022	0.003	0.047	0.031	0.128
		10W	0.020	0.014	0.060	0.037	0.118		10W	-0.031	-0.005	0.021	0.027	0.082
	1-1/2" N	12W	0.010	0.007	0.033	0.038	0.110		12W	-0.037	-0.008	-0.007	0.019	0.097
		14W	0.005	0.004	0.017	0.025	0.160		14W	-0.039	-0.010	-0.013	0.010	0.104
		16W	0.003	0.002	0.009	0.016	0.113		16W	-0.041	-0.010	-0.017	0.003	0.024
		18W	0.001	0.001	0.005	0.010	0.067		18W	-0.041	-0.010	-0.019	-0.002	-0.005
		20W	--	0.001	0.003	0.005	0.040		20W	-0.042	-0.010	-0.019	-0.004	-0.023
	2" N	22W	--	--	0.002	0.003	0.023		22W	-0.042	-0.010	-0.019	-0.005	-0.033
		24W	--	--	--	0.002	0.013		24W	-0.042	-0.010	-0.019	-0.006	-0.038
		26W	--	--	--	0.001	0.006		26W	-0.042	-0.010	-0.019	-0.006	-0.040

(Continued)

(4 of 7 sheets)

Table A2(Continued)

Vertical Pressure, psi, at Indicated Cells														
Forward, Avg Speed = 1.60 mph							Reverse, Avg Speed = 1.75 mph							
Row	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀
11	0	12E	0.30	0.63	2.60	0.80	--	2"S	12E	0.10	0.40	--	0.70	--
		10E	0.30	0.63	2.50	0.80	--		10E	0.10	0.35	--	0.70	--
		8E	3.00	0.63	2.50	0.60	--		8E	0.10	0.35	--	0.60	--
		6E	0.30	0.50	2.50	0.50	--		6E	0.20	0.45	--	0.60	--
		4E	0.40	0.65	2.40	0.40	--		4E	0.30	0.10	--	0.60	--
		2E	0.80	0.84	2.30	0.50	--		2E	0.60	0.95	--	0.72	--
		A	1.50	1.45	2.30	0.70	--		A	1.40	1.12	--	0.90	--
		B	2.70	1.90	2.20	1.00	--		B	3.30	2.05	--	1.20	--
		C	4.40	2.57	2.20	1.50	--		C	4.60	2.80	0.48	1.86	--
		D	5.26	3.05	2.20	1.90	--		D	6.60	3.25	0.80	2.40	--
		E	5.30	3.47	2.10	2.40	--		E	7.70	3.70	1.40	2.90	--
		F	9.70	4.22	2.60	3.50	--		F	11.60	4.35	3.90	4.40	--
		O	13.50	4.75	2.50	4.80	--		G	13.50	4.80	4.40	6.00	--
		H	9.70	4.95	4.60	6.30	--		H	8.40	4.80	7.40	7.30	--
		I	3.60	4.75	9.20	7.50	--		I	3.30	4.45	8.50	8.48	--
		J	1.70	4.25	3.30	7.70	--		J	1.80	4.00	3.00	8.36	--
		K	1.30	3.85	2.20	6.40	--		K	1.70	3.60	0.50	6.50	--
		L	1.70	3.75	1.50	3.30	--		L	2.10	3.55	0.30	5.60	--
		M	2.50	3.60	1.20	4.50	--		M	3.10	3.50	0.40	4.60	--
		N	4.50	3.70	0.90	3.40	--		N	5.04	3.75	0.60	3.80	--
		2W	6.30	4.15	0.70	3.20	--		2W	7.10	4.11	1.40	3.96	--
		4W	9.00	4.63	1.61	3.70	--		4W	11.70	4.64	3.90	5.00	--
		6W	13.00	5.03	2.00	5.00	--		6W	12.80	4.78	4.80	6.60	--
		8W	9.00	5.03	3.00	6.40	--		8W	6.46	4.50	8.90	7.90	--
		10W	4.46	4.65	8.00	7.50	--		10W	2.70	3.70	6.40	8.40	--
		12W	1.70	3.95	6.80	7.80	--		12W	1.20	2.75	1.30	7.30	--
		14W	0.70	3.00	1.90	6.50	--		14W	0.50	1.95	1.00	5.10	--
		16W	0.38	2.15	0.90	4.40	--		16W	0.10	1.30	0.90	3.60	--
		18W	0.10	1.45	0.50	3.50	--		18W	--	0.75	0.80	2.30	--
		20W	--	0.90	0.40	1.40	--		20W	--	0.45	0.70	1.80	--
		22W	--	0.50	0.30	0.80	--		22W	--	0.15	0.70	1.30	--
		24W	--	0.30	0.20	0.36	--		24W	--	--	0.70	0.90	--
		26W	--	0.18	--	0.20	--		26W	--	--	0.70	0.80	--

Vertical Deflection, in., at Indicated Gages

Forward, Avg Speed = 1.60 mph						Reverse, Avg Speed = 1.75 mph								
Position	Location	D ₁	D ₂	D ₃	D ₄	D ₅	Position	Location	D ₁	D ₂	D ₃	D ₄	D ₅	
11	0	12E	0.054	-0.007	-0.007	-0.004	0.035	2"S	12E	0.003	0.003	0.003	0.001	--
		10E	0.055	-0.007	-0.007	-0.004	0.035		10E	0.006	0.006	0.004	0.001	--
		8E	0.055	-0.005	-0.007	-0.004	0.035		8E	0.010	0.010	0.006	0.001	--
		6E	0.056	-0.001	-0.004	-0.004	0.035		6E	0.015	0.019	0.009	0.002	--
		4E	0.063	0.007	-0.003	-0.004	0.038		4E	0.030	0.032	0.014	0.003	0.003
		2E	0.073	0.021	0.001	-0.003	0.038		2E	0.048	0.050	0.023	0.004	0.004
		A	0.079	0.041	0.012	-0.002	0.038		A	0.070	0.064	0.040	0.007	0.005
		B	0.083	0.054	0.032	--	0.039		B	0.089	0.069	0.073	0.012	0.009
		C	0.105	0.063	0.068	0.004	0.042		C	0.111	0.069	0.104	0.018	0.015
		D	0.130	0.066	0.087	0.008	0.043		D	0.125	0.067	0.108	0.023	0.020
		E	0.153	0.066	0.089	0.011	0.047		E	0.128	0.061	0.104	0.027	0.025
		F	0.113	0.054	0.097	0.021	0.050		F	0.070	0.045	0.108	0.035	0.047
		O	0.074	0.037	0.115	0.027	0.075		O	0.040	0.031	0.105	0.038	0.080
		H	0.050	0.026	0.094	0.035	0.102		H	0.030	0.027	0.066	0.038	0.115
		I	0.043	0.024	0.053	0.037	0.113		I	0.034	0.031	0.037	0.035	0.115
		J	0.045	0.032	0.033	0.033	0.128		J	0.041	0.044	0.031	0.027	0.120
		K	0.060	0.048	0.028	0.025	0.136		K	0.068	0.058	0.040	0.021	0.110
		L	0.069	0.056	0.033	0.021	0.120		L	0.084	0.061	0.048	0.019	0.090
		M	0.074	0.061	0.043	0.019	0.100		M	0.085	0.062	0.066	0.018	0.075
		N	0.085	0.068	0.077	0.017	0.073		N	0.104	0.061	0.095	0.020	0.050
		2W	0.125	0.071	0.103	0.020	0.048		2W	0.128	0.053	0.094	0.026	0.035
		4W	0.120	0.060	0.105	0.026	0.039		4W	0.091	0.031	0.094	0.032	0.053
		6W	0.065	0.041	0.117	0.033	0.058		6W	0.035	0.013	0.082	0.035	0.066
		8W	0.036	0.024	0.107	0.038	0.090		8W	0.019	--	0.033	0.033	0.115
		10W	0.019	0.013	0.060	0.040	0.110		10W	0.011	-0.005	0.009	0.025	0.110
		12W	0.010	0.006	0.032	0.036	0.120		12W	0.008	-0.007	-0.004	0.014	0.110
		14W	0.005	0.003	0.016	0.027	0.130		14W	0.006	-0.008	-0.009	0.006	0.078
		16W	0.003	0.001	0.010	0.018	0.104		16W	0.005	-0.008	-0.011	0.001	0.045
		18W	0.001	--	0.007	0.016	0.070		18W	0.005	-0.008	-0.013	-0.003	0.080
		20W	--	--	0.002	0.006	0.036		20W	0.005	-0.008	-0.013	-0.005	0.010
		22W	--	--	0.001	0.003	0.020		22W	0.005	-0.008	-0.013	-0.006	--
		24W	--	--	--	0.001	0.010		24W	0.005	-0.008	-0.013	-0.006	-0.005
		26W	--	--	--	--	0.005		26W	0.005	-0.008	-0.013	-0.006	-0.007

(Continued)

(5 of 7 sheets)

Table A2(Continued)

Vertical Pressure, psi, at Indicated Cells											
Forward, Avg Speed = 1.91 mph						Reverse, Avg Speed = 1.92 mph					
Rev	Position	Location	P ₆	P ₇	P ₈	Position	Location	P ₆	P ₇	P ₈	P ₉
13	1" N	26E	0.40	0.30	2.00	5" S	26E	--	0.18	--	-0.15
		24E	0.44	0.36	2.00		24E	--	0.20	--	-0.15
		22E	0.60	0.42	2.00		22E	0.08	0.32	--	-0.15
		20E	0.60	0.44	2.00		20E	0.36	0.42	--	--
		18E	0.56	0.40	2.00		18E	0.40	0.44	--	--
		16E	0.40	0.62	2.00		16E	0.40	0.50	--	0.03
		14E	0.20	0.60	1.95		14E	0.40	0.50	0.10	0.30
		12E	0.08	0.56	1.75		12E	0.20	0.46	0.10	0.33
		10E	--	0.44	1.55		10E	0.20	0.44	0.10	0.30
		8E	--	0.42	1.50		8E	0.20	0.40	0.10	0.15
		6E	--	0.42	1.55		6E	0.12	0.42	0.10	0.06
		4E	0.04	0.50	1.50		4E	0.32	0.58	0.10	0.03
		2E	0.20	0.70	1.50		2E	0.40	0.80	0.10	0.03
		A	0.64	1.02	1.45		A	0.96	1.16	0.15	0.15
		B	1.24	1.33	1.45		B	1.52	1.60	0.25	0.30
		C	2.04	2.00	1.50		C	2.52	2.22	0.50	0.87
		D	2.60	2.21	1.50		D	3.00	2.60	0.60	1.20
		E	3.00	2.62	1.55		E	4.36	2.90	0.95	1.50
		F	5.72	3.14	1.90		F	7.88	3.58	1.90	2.42
		G	8.56	3.60	2.00		G	9.80	4.00	2.65	3.13
		H	5.24	3.90	3.35		H	6.08	4.02	5.15	4.80
		I	2.48	3.76	7.00		I	2.60	3.72	7.10	5.70
		J	1.40	3.40	5.00		J	1.48	3.40	2.65	5.70
		K	0.80	3.00	2.10		K	1.16	3.00	0.95	4.20
		L	1.12	2.96	1.50		L	1.32	2.98	0.70	4.76
		M	1.28	2.90	1.40		M	1.60	2.98	0.55	3.00
		N	2.04	2.96	1.05		N	2.48	3.22	0.50	2.84
		2W	3.28	3.26	1.00		2W	4.00	3.60	0.85	2.34
		4W	5.80	3.72	1.25		4W	7.24	3.90	1.75	2.85
		6W	8.84	4.00	1.45		6W	9.40	4.04	2.40	3.60
		8W	5.40	4.00	3.15		8W	6.68	2.02	4.00	4.80
		10W	2.08	3.50	6.75		10W	3.16	3.64	7.15	5.55
		12W	0.84	2.76	3.25		12W	1.60	3.00	3.90	5.64
		14W	0.40	2.00	1.25		14W	0.60	2.38	1.25	4.53
		16W	0.12	1.50	0.75		16W	0.20	1.76	0.75	3.15
		18W	--	0.76	0.50		18W	--	1.10	0.50	1.80
		20W	--	0.40	0.60		20W	--	0.78	0.40	1.05
		22W	--	0.20	0.30		22W	--	0.58	0.40	0.36
		24W	--	0.10	0.20		24W	--	0.30	0.40	--
		26W	--	--	0.20		26W	--	0.20	0.30	--

Vertical Deflection, in., at Indicated Gages

Forward, Avg Speed = 1.91 mph					Reverse, Avg Speed = 1.92 mph							
Position	Location	D ₆	D ₇	D ₈	Position	Location	D ₆	D ₇	D ₈	D ₉		
13	1" N	26E	-0.005	-0.008	-0.004	-0.056	5" S	26E	0.001	0.002	0.001	0.001
		24E	-0.005	-0.008	-0.004	-0.056		24E	0.001	0.002	0.001	0.001
		22E	-0.005	-0.008	-0.004	-0.056		22E	0.001	0.002	0.001	0.005
		20E	-0.005	-0.008	-0.004	-0.056		20E	0.001	0.002	0.001	0.002
		18E	-0.005	-0.008	-0.004	-0.055		18E	0.001	0.002	0.001	0.002
		16E	-0.005	-0.008	-0.004	-0.055		16E	0.002	0.002	0.001	0.002
		14E	-0.005	-0.008	-0.004	-0.055		14E	0.002	0.002	0.001	0.003
		12E	-0.005	-0.008	-0.004	-0.055		12E	0.003	0.003	0.001	0.003
		10E	-0.004	-0.008	-0.004	-0.055		10E	0.005	0.004	0.001	0.003
		8E	-0.003	-0.008	-0.004	-0.055		8E	0.009	0.006	0.001	0.004
		6E	0.001	-0.006	-0.004	-0.055		6E	0.016	-0.007	-0.002	-0.005
		4E	0.009	-0.005	-0.004	-0.055		4E	0.028	0.012	0.002	-0.005
		2E	0.021	-0.002	-0.002	-0.055		2E	0.043	0.020	0.003	0.006
		A	-0.039	0.006	-0.002	-0.055		A	0.057	0.036	0.006	0.009
		B	0.051	0.022	--	-0.054		B	0.062	0.066	0.010	0.012
		C	0.060	0.060	0.003	-0.052		C	0.064	0.095	0.015	0.018
		D	0.063	0.076	0.005	-0.050		D	0.063	0.100	0.020	0.022
		E	0.063	0.080	0.009	-0.048		E	0.058	0.096	0.023	0.028
		F	0.052	0.088	0.017	-0.038		F	0.044	0.104	0.030	0.048
		G	0.037	0.104	0.023	-0.022		G	0.028	0.100	0.033	0.031
		H	0.026	0.086	0.028	0.057		H	0.023	0.062	-0.033	0.141
		I	0.024	0.050	0.030	0.079		I	0.027	0.035	0.030	0.102
		J	0.031	0.030	0.026	0.079		J	0.031	0.026	0.023	0.118
		K	0.046	0.025	0.021	0.137		K	0.052	0.032	0.018	0.135
		L	0.054	0.028	0.017	0.122		L	0.056	0.042	0.017	0.089
		M	0.058	0.036	0.016	0.088		M	0.057	0.058	0.017	0.051
		N	0.064	0.070	0.014	0.048		N	0.057	0.088	0.018	0.030
		2W	0.067	0.054	0.017	0.023		2W	0.050	0.086	0.022	0.026
		4W	0.075	0.054	0.023	0.016		4W	-0.033	0.085	0.027	0.094
		6W	0.096	0.110	0.028	0.028		6W	0.016	0.086	0.030	0.062
		8W	0.080	0.084	0.033	0.115		8W	0.005	0.052	0.029	0.117
		10W	0.110	0.046	0.033	0.107		10W	-0.002	0.018	0.026	0.095
		12W	0.095	0.024	0.025	0.118		12W	-0.005	0.002	0.020	0.087
		14W	0.003	0.013	0.017	0.146		14W	-0.006	-0.005	0.012	0.118
		16W	0.002	0.007	0.011	0.085		16W	-0.007	-0.010	0.006	0.043
		18W	0.001	0.004	0.005	0.048		18W	-0.007	-0.012	0.003	0.004
		20W	0.001	0.002	0.002	0.026		20W	-0.007	-0.012	-0.001	0.014
		22W	0.001	0.002	0.001	0.014		22W	-0.007	-0.012	-0.002	0.026
		24W	0.001	0.001	0.001	0.075		24W	-0.007	-0.012	-0.002	0.032
		26W	0.001	0.001	0.001	0.035		26W	-0.007	-0.012	-0.002	0.036

(Continued)

(6 of 7 sheets)

Table A20(Continued)

Vertical Pressure, psi, at Indicated Cells														
Forward, Avg Speed = 1.94 mph										Reverse, Avg Speed =				
Row	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀
15	0	26E	0.54	0.30	1.50	0.40	out	None	26E	0.04	0.10	--	--	out
		24E	0.66	0.39	1.50	0.44			24E	0.16	0.15	--	--	
		22E	0.98	0.52	1.56	0.52			22E	0.36	0.30	--	0.06	
		20E	1.34	0.65	1.64	0.64			20E	0.72	0.41	0.06	0.24	
		18E	1.46	0.75	1.76	0.80			18E	0.98	0.53	0.24	0.33	
		16E	1.08	0.91	1.94	1.00			16E	0.94	0.59	0.50	0.60	
		14E	0.56	0.89	1.90	1.24			14E	0.56	0.57	0.52	0.75	
		12E	0.20	0.79	1.56	1.40			12E	0.40	0.45	0.36	0.75	
		10E	0.08	0.65	1.26	1.32			10E	0.32	0.40	0.24	0.75	
		8E	--	0.63	1.16	1.04			8E	0.32	0.26	0.06	0.45	
		6E	--	0.4	1.10	0.80			6E	0.30	0.28	--	0.45	
		4E	0.08	0.61	1.02	0.64			4E	0.38	0.28	--	0.30	
		2E	0.20	0.71	1.02	0.56			2E	0.44	0.48	--	0.24	
		A	0.42	0.88	1.02	0.56			A	0.72	0.80	--	0.27	
		B	0.70	1.19	1.00	0.72			B	1.10	1.15	--	0.45	
		C	1.22	1.59	1.04	0.96			C	1.68	1.62	--	1.75	
		D	1.62	1.80	1.06	1.20			D	2.00	1.85	0.12	0.96	
		E	2.06	2.01	1.16	1.36			E	2.60	2.10	0.22	1.26	
		F	3.00	2.47	1.22	1.72			F	4.12	2.58	0.44	1.86	
		G	3.66	2.81	1.58	2.56			G	5.02	2.90	0.82	2.46	
		H	2.82	2.95	1.0	3.24			H	3.84	3.02	1.84	3.60	
		I	1.64	2.96	1.62	3.84			I	2.30	2.89	2.62	4.26	
		J	0.84	2.65	2.00	4.00			J	1.42	2.58	1.90	4.26	
		K	0.74	2.44	1.10	3.48			K	1.10	2.36	0.96	3.39	
		L	0.80	2.35	0.86	3.04			L	1.16	2.31	0.70	3.00	
		M	0.90	2.39	0.61	2.68			M	1.20	2.23	0.56	2.46	
		N	1.40	2.40	0.44	2.16			N	1.60	2.37	0.40	2.26	
		2W	2.00	2.65	0.50	2.00			2W	2.46	2.60	0.44	2.26	
		4W	2.98	2.94	0.75	2.24			4W	3.70	2.85	0.72	2.56	
		6W	3.90	3.15	0.90	2.80			6W	4.70	3.10	1.04	2.70	
		8W	3.34	3.19	1.44	3.40			8W	4.20	3.06	1.64	3.45	
		10W	1.80	2.94	2.38	4.00			10W	2.58	2.80	2.64	4.05	
		12W	0.80	2.51	2.12	4.20			12W	1.50	2.32	2.42	4.23	
		14W	0.40	1.98	1.16	3.60			14W	1.02	1.85	1.50	3.66	
		16W	0.20	1.41	0.62	2.60			16W	0.64	1.29	0.96	2.55	
		18W	0.10	0.97	0.30	1.60			18W	0.50	0.91	0.72	1.80	
		20W	--	0.56	0.20	1.00			20W	0.30	0.52	0.44	1.14	
		22W	-0.10	0.35	0.10	0.50			22W	0.30	0.25	0.42	0.60	
		24W	-0.10	0.21	0.06	0.24			24W	0.30	0.10	0.38	0.30	
		26W	-0.10	0.10	0.04	0.12			26W	0.30	--	0.38	0.06	

Vertical Deflection, in., at Indicated Gages																
Forward, Avg Speed = 1.94 mph							Reverse, Avg Speed =							mph		
Position	Location	D ₆	D ₇	D ₈	D ₉		Position	Location	D ₆	D ₇	D ₈	D ₉				
15	0	26E	-0.006	-0.002	-0.004	0.030	None	26E	0.001	0.001	--	0.001				
		24E	-0.005	-0.002	-0.004	0.030		24E	0.002	0.001	--	0.001				
		22E	-0.005	-0.002	-0.004	0.030		22E	0.002	0.001	--	0.001				
		20E	-0.005	-0.002	-0.004	0.030		20E	0.002	0.001	--	0.001				
		18E	-0.006	-0.002	-0.004	0.030		18E	0.002	0.001	--	0.002				
		16E	-0.006	-0.002	-0.004	0.030		16E	0.003	0.002	0.001	0.002				
		14E	-0.005	-0.003	-0.004	0.030		14E	0.003	0.002	0.002	0.002				
		12E	-0.005	-0.003	-0.004	0.030		12E	0.005	0.003	0.002	0.003				
		10E	-0.004	-0.003	-0.004	0.030		10E	0.007	0.004	0.002	0.003				
		8E	-0.003	-0.004	-0.004	0.030		8E	0.012	0.006	0.002	0.004				
		6E	0.001	-0.003	-0.004	0.030		6E	0.020	0.008	0.002	0.004				
		4E	0.009	-0.001	-0.003	0.030		4E	0.035	0.014	0.003	0.005				
		2E	0.024	0.004	-0.003	0.030		2E	0.051	0.023	0.004	0.007				
		A	0.044	0.012	-0.002	0.030		A	0.067	0.041	0.008	0.009				
		B	0.057	0.032	--	0.031		B	0.071	0.071	0.012	0.013				
		C	0.066	0.048	0.004	0.033		C	0.071	0.101	0.019	0.019				
		D	0.069	0.061	0.006	0.034		D	0.068	0.102	0.023	0.023				
		E	0.069	0.066	0.010	0.038		E	0.063	0.102	0.027	0.031				
		F	0.058	0.094	0.018	0.047		F	0.047	0.101	0.033	0.051				
		G	0.041	0.108	0.027	0.065		G	0.033	0.100	0.037	0.085				
		H	0.028	0.091	0.033	0.097		H	0.028	0.066	0.037	0.123				
		I	0.026	0.056	0.035	0.115		I	0.034	0.037	0.033	0.122				
		J	0.035	0.037	0.030	0.129		J	0.047	0.030	0.026	0.125				
		K	0.050	0.031	0.024	0.142		K	0.061	0.037	0.020	0.119				
		L	0.058	0.034	0.020	0.134		L	0.064	0.047	0.018	0.099				
		M	0.063	0.042	0.018	0.115		M	0.065	0.061	0.018	0.079				
		N	0.071	0.077	0.016	0.078		N	0.064	0.090	0.020	0.052				
		2W	0.074	0.097	0.019	0.053		2W	0.058	0.093	0.025	0.043				
		4W	0.063	0.099	0.025	0.046		4W	0.041	0.088	0.030	0.051				
		6W	0.044	0.111	0.031	0.057		6W	0.022	0.090	0.034	0.075				
		8W	0.027	0.101	0.035	0.069		8W	0.009	0.065	0.034	0.133				
		10W	0.015	0.069	0.036	0.115		10W	--	0.028	0.031	0.111				
		12W	0.009	0.042	0.033	0.124		12W	-0.003	0.008	0.024	0.116				
		14W	0.005	0.022	0.025	0.137		14W	-0.005	-0.002	0.016	0.118				
		16W	0.003	0.014	0.017	0.117		16W	-0.006	-0.006	0.008	0.090				
		18W	0.002	0.009	0.010	0.077		18W	-0.006	-0.010	0.004	0.055				
		20W	0.001	0.006	0.006	0.046		20W	-0.006	-0.011	--	0.030				
		22W	0.001	0.004	0.003	0.027		22W	-0.006	-0.011	-0.001	0.017				
		24W	--	0.003	0.001	0.016		24W	-0.006	-0.011	0.002	0.007				
		26W	--	0.003	0.001	0.010		26W	-0.006	-0.011	0.003	0.002				

(7 of 7 sheets)

Table A-21

Multiple-Wheel Heavy Gear Load Flexible Pavement Test, Dynamic Instrumentation Loading Data

Item 4; Load Condition: 30 kips per wheel, 12 wheels, 100 psi

Vertical Pressure, psi, at Indicated Cells													
Forward, Avg Speed = 2.03 mph							Reverse, Avg Speed = 1.81 mph						
Rev	Position	Location	P ₁	P ₂	P ₃	P ₄	Position	Location	P ₁	P ₂	P ₃	P ₄	P ₅
5	0	24E	0.24	3.60	-0.09	1.30	None	24E	0.06	--	0.14	--	
		22E	0.25	3.60	-0.07	1.28		22E	0.08	--	0.19	--	
		20E	0.25	3.60	--	1.28		20E	0.08	--	0.26	--	
		18E	0.24	3.55	0.03	1.26		18E	0.08	--	0.30	--	
		16E	0.23	3.55	0.03	1.31		16E	0.07	--	0.32	--	
		14E	0.23	3.55	0.03	1.33		14E	0.07	--	0.34	--	
		12E	0.26	3.55	0.02	1.36		12E	0.09	--	0.36	--	
		10E	0.23	3.60	0.02	1.34		10E	0.16	--	0.40	--	
		8E	0.55	3.65	0.07	1.27		8E	0.30	--	0.48	--	
		6E	0.92	3.70	0.20	1.30		6E	0.69	0.05	0.64	--	
		4E	1.55	3.85	0.42	1.52		4E	1.47	0.15	0.98	--	
		2E	2.63	4.25	0.90	1.43		2E	2.83	0.50	1.56	--	
		A	4.26	5.00	1.54	1.75	1" ↓	A	4.87	1.55	2.49	0.32	
		B	6.22	7.70	2.59	2.42		B	6.74	6.20	3.78	0.89	
		C	7.63	15.20	3.85	3.61		C	7.76	14.50	5.21	2.54	
		D	8.18	15.95	4.60	4.76		D	8.05	13.20	5.94	1.16	
		E	8.50	13.55	5.34	6.48		E	8.22	10.15	6.64	6.96	
		F	8.35	12.10	6.66	10.96		F	7.51	10.25	7.61	11.35	
		G	6.46	16.75	7.50	12.32		G	5.68	14.05	7.90	11.06	
		H	4.34	9.05	7.53	12.68	0	H	3.85	6.65	7.43	11.64	
		I	3.00	2.80	6.73	13.77		I	3.04	2.00	6.43	11.81	
		J	2.97	1.20	5.65	8.64		J	3.50	0.95	5.45	7.02	
		K	4.14	1.30	4.82	3.92		K	5.09	1.50	4.97	3.16	
		L	5.24	2.40	4.63	2.61		L	6.00	2.90	4.96	2.20	
		M	6.16	4.30	4.62	2.00		M	6.85	5.25	5.19	2.00	
		N	7.60	12.50	5.09	2.18		N	7.75	14.70	5.95	2.78	
		2W	8.55	13.60	6.18	5.26		2W	8.10	11.40	6.89	6.06	
		4W	8.32	10.20	7.15	10.26		4W	7.50	9.50	7.56	11.05	
		6W	6.43	14.65	7.80	12.20		6W	5.96	14.50	7.83	11.46	
		8W	4.01	9.10	7.66	12.08		8W	3.89	7.95	7.10	11.20	
		10W	2.16	2.55	6.67	13.20		10W	2.30	2.75	5.88	11.52	
		12W	1.07	0.60	5.08	8.96		12W	1.30	1.15	4.38	7.80	
		14W	0.52	0.15	3.58	4.05		14W	0.70	0.60	2.96	3.64	
		16W	0.20	--	2.26	1.44		16W	0.32	0.40	1.89	1.66	
		18W	0.06	--	1.37	0.46		18W	0.14	0.35	1.05	0.55	
		20W	--	--	0.78	0.10		20W	0.02	0.30	0.54	0.06	
		22W	--	--	0.42	--		22W	--	0.35	0.20	-0.14	
		24W	--	--	0.22	--		24W	--	0.35	0.01	-0.16	
		26W	--	--	0.12	--		26W	--	0.35	-0.09	-0.16	
								28W	--	0.35	-0.13	-0.14	

(Continued)

• No pressure recorded.

(1 of 8 sheets)

Table A21 (Continued)

		Vertical Pressure, psi, at 1-in. Gated Cells												
		Forward, Avg Speed = 1.65 mph										Reverse, Avg Speed = 1.75 mph		
Row	Position	Location	P ₁	P ₂	P ₃	P ₄	P ₅	Position	Location	P ₁	P ₂	P ₃	P ₄	P ₅
7	1"S	24E	--	0.28	0.50	0.03	0.13	4"S	24E	--	0.06	--	0.16	--
		22E	--	0.30	0.50	0.07	0.12		22E	--	0.06	--	0.21	--
		20E	--	0.26	0.50	0.14	0.10		20E	--	0.10	--	0.27	--
		18E	--	0.27	0.45	0.18	0.10		18E	--	0.12	--	0.35	--
		16E	--	0.19	0.35	0.19	0.10		16E	--	0.12	--	0.40	--
		14E	--	0.18	0.35	0.19	0.08		14E	--	0.12	--	0.40	--
		12E	--	0.17	0.35	0.15	0.06		12E	--	0.14	--	0.40	--
		10E	--	0.26	0.30	0.14	0.06		10E	--	0.22	--	0.42	--
		8E	--	0.44	0.30	0.18	0.04		8E	--	0.36	0.10	0.48	--
		6E	--	0.81	0.35	0.27	0.02		6E	--	0.72	0.10	0.63	--
	2"S	4E	--	1.45	0.55	0.48	--		4E	--	1.44	0.15	0.95	--
		2E	--	2.48	0.85	0.91	0.06		2E	--	2.74	0.45	1.48	0.10
		A	39.80	4.03	1.75	1.57	0.40		A	48.80	4.65	1.50	2.33	0.34
		B	--	5.90	5.00	2.56	0.98		B	0.30	6.32	7.35	3.56	0.96
		C	--	7.36	19.10	3.82	2.22		C	0.15	7.79	23.40	5.02	2.50
		D	20.45	7.88	21.00	4.48	3.32		D	29.20	8.18	20.50	5.73	4.10
		E	43.60	8.30	15.30	5.18	5.10		E	37.80	8.43	12.75	6.41	6.70
		F	--	8.34	13.05	6.48	10.16		F	--	7.78	14.70	7.30	12.04
		G	--	6.48	26.05	7.30	11.40		G	--	5.86	23.90	7.66	11.42
		H	--	4.27	11.70	7.32	12.60		H	--	3.93	7.20	7.19	12.96
	1"S	I	--	2.88	1.75	6.59	15.32		I	--	3.04	0.85	6.23	13.58
		J	--	2.74	0.10	5.39	9.12		J	--	3.40	0.30	5.20	5.18
		K	25.15	3.82	0.10	4.58	3.68		K	39.00	4.84	1.00	4.71	2.94
		L	39.40	4.70	0.50	4.34	2.15		L	36.10	5.77	2.35	4.70	2.02
		M	0.80	5.70	2.25	4.35	1.46		M	0.55	6.67	5.45	4.93	1.82
		N	--	7.22	16.80	4.84	1.54		N	--	7.69	21.80	5.65	2.58
		2W	43.90	8.31	18.75	5.90	4.34		2W	47.00	8.45	15.80	6.69	5.90
		4W	--	6.35	11.90	6.84	9.86		4W	--	7.98	12.10	7.36	11.64
		6W	--	6.44	25.25	7.54	12.20		6W	--	6.27	24.55	7.60	11.60
		8W	--	3.98	13.70	7.42	12.43		8W	--	4.20	10.45	7.13	12.34
	0	10W	--	2.14	2.55	6.50	15.16		10W	--	2.53	1.40	5.91	14.18
		12W	--	1.04	0.35	4.93	10.22		12W	--	1.51	--	4.40	8.55
		14W	--	0.50	--	3.45	4.10		14W	--	0.86	0.53	2.96	3.64
		16W	--	0.20	--	2.16	1.14		16W	--	0.51	0.55	1.89	1.46
		18W	--	0.05	--	1.28	0.30		18W	--	0.30	0.60	1.10	0.36
		20W	--	--	--	0.73	--		20W	--	0.19	0.60	0.60	-0.08
		22W	--	--	--	0.37	--		22W	--	0.13	0.60	0.28	-0.27
		24W	--	--	--	0.18	--		24W	--	0.12	0.55	0.12	-0.28
		26W	--	--	--	0.08	--		26W	--	0.12	0.55	0.02	-0.29
		28W	--	--	--	0.03	--		28W	--	0.13	0.55	-0.04	-0.28

(Continued)

(2 of 8 sheets)

Table A2N(Continued)

Vertical Pressure, psi, at Indicated Cells													
Forward, Avg Speed = 1.91 mph							Reverse, Avg Speed = 1.77 mph						
Row	Position	Location	P ₆	P ₇	P ₈	P ₉	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀
9	3/4" N 1" N	12E	0.40	--	0.20	--	0.90	7" S	12E	--	--	0.62	--
		10E	0.35	0.20	0.20	--	0.92	10E	--	0.11	--	0.63	--
		8E	0.40	0.40	0.18	0.15	0.86	8E	--	0.33	--	0.70	--
		6E	0.45	0.90	0.21	0.20	0.86	6E	-0.10	0.77	0.03	0.89	--
		4E	0.40	1.68	0.21	0.45	0.80	4E	-0.10	1.92	7.05	1.20	--
		2E	0.15	3.20	0.21	0.89	0.80	2E	-0.12	3.49	0.08	1.71	0.10
		A	0.50	5.38	0.28	1.48	0.98	A	-0.20	5.91	0.16	2.51	0.18
		B	--	7.72	0.37	2.40	1.30	B	-0.22	8.21	0.40	3.69	0.54
		C	--	9.44	0.65	3.58	2.02	C	-0.18	9.54	0.64	4.96	1.40
		D	0.20	10.16	0.73	4.26	2.80	D	-0.24	9.65	0.61	5.67	2.38
		E	0.10	10.60	0.68	4.91	4.00	E	-1.28	9.88	0.54	6.22	3.96
		F	--	10.20	0.59	6.20	7.78	F	-0.20	8.81	0.54	7.10	8.01
		G	--	7.80	0.77	6.58	9.22	G	--	6.46	0.59	7.47	8.40
		H	--	5.32	0.55	7.24	9.52	H	--	4.29	0.30	7.02	8.56
		I	--	3.60	0.19	6.60	10.80	I	-0.10	3.26	0.09	6.15	9.54
		J	--	3.60	0.05	5.60	7.40	J	-0.20	4.03	1.05	5.35	6.34
		K	0.30	5.24	0.05	4.59	3.50	K	-0.21	5.80	0.13	4.87	3.00
		L	0.20	6.60	0.10	4.48	2.26	L	-0.18	7.04	0.24	4.87	2.06
		M	--	7.68	0.20	4.40	1.58	M	-0.27	7.96	0.37	5.00	1.52
		N	--	9.50	0.54	4.78	1.40	N	-0.30	8.97	0.65	5.61	1.71
		2W	--	10.60	0.64	5.70	3.24	2W	-0.32	9.30	0.58	6.57	3.64
		4W	--	10.22	0.53	6.60	7.30	4W	-0.20	8.56	0.51	7.20	7.70
		6W	--	7.80	0.65	7.29	9.32	6W	--	6.43	0.58	7.44	4.58
		8W	--	5.00	0.52	7.31	9.20	8W	--	4.08	0.32	6.95	8.02
		10W	--	2.68	0.15	6.40	10.30	10W	--	2.09	0.10	5.87	9.26
		12W	--	1.34	--	5.12	7.46	12W	--	0.82	0.03	4.57	7.11
		14W	--	0.92	--	3.71	3.70	14W	--	0.03	--	3.04	3.48
		16W	--	0.32	--	2.35	1.40	16W	--	-0.48	--	2.01	1.80
		18W	--	0.16	--	1.40	0.50	18W	--	-0.69	--	1.32	0.83
		20W	--	--	--	0.81	0.20	20W	--	-0.90	--	0.80	0.33
		22W	--	--	--	0.46	0.16	22W	--	-0.92	--	0.52	0.08
		24W	--	--	--	0.25	--	24W	--	-0.93	--	0.33	--
		26W	--	--	--	0.20	--	26W	--	-0.94	--	0.21	--
								28W	--	-0.95	--	0.11	--
								30W	--	-0.96	--	0.12	--

Vertical Deflection, in., at Indicated Gages														
Forward, Avg Speed = 1.91 mph							Reverse, Avg Speed = 1.77 mph							
Position	Location	D ₁	D ₂	D ₃	D ₄	D ₅	Position	Location	D ₁	D ₂	D ₃	D ₄	D ₅	
9	3/4" N 1" N	12E	0.059	0.017	-0.003	-0.024	-0.020	7" S	12E	--	0.007	0.011	0.008	0.005
		10E	0.060	0.018	-0.003	-0.025	-0.020	10E	--	0.012	0.014	0.009	0.006	
		8E	0.059	0.019	-0.003	-0.026	-0.020	8E	--	0.018	0.016	0.009	0.007	
		6E	0.060	0.028	-0.003	-0.026	-0.021	6E	--	0.032	0.018	0.009	0.007	
		4E	0.060	0.040	-0.003	-0.027	-0.021	4E	--	0.054	0.022	0.012	0.007	
		2E	0.059	0.062	-0.003	-0.026	-0.021	2E	0.003	0.083	0.025	0.014	0.007	
		A	0.060	0.097	-0.002	-0.024	-0.022	A	0.003	0.115	0.027	0.020	0.009	
		B	0.059	0.115	-0.001	-0.018	-0.023	B	0.006	0.137	0.029	0.032	0.013	
		C	0.062	0.138	--	-0.006	-0.022	C	0.015	0.163	0.029	0.054	0.018	
		D	0.065	0.166	0.001	0.004	-0.020	D	0.021	0.177	0.028	0.069	0.021	
		E	0.068	0.184	0.003	0.018	-0.017	E	0.029	0.163	0.027	0.087	0.030	
		F	0.083	0.129	0.007	0.066	-0.006	F	0.056	0.081	0.024	0.127	0.051	
		G	0.104	0.078	0.011	0.094	0.017	G	0.099	0.047	0.020	0.144	0.080	
		H	0.137	0.050	0.015	0.123	0.051	H	0.148	0.037	0.018	0.170	0.107	
		I	0.159	0.041	0.017	0.166	0.079	I	0.153	0.047	0.037	0.169	0.131	
		J	0.175	0.052	0.018	0.137	0.101	J	0.154	0.073	0.019	0.102	0.137	
		K	0.191	0.085	0.017	0.078	0.122	K	0.148	0.113	0.020	0.052	0.121	
		L	0.178	0.102	0.017	0.056	0.116	L	0.124	0.116	0.020	0.042	0.099	
		M	0.154	0.111	0.017	0.042	0.100	M	0.095	0.125	0.020	0.039	0.075	
		N	0.100	0.132	0.016	0.030	0.057	N	0.057	0.146	0.018	0.046	0.043	
		2W	0.065	0.182	0.021	0.041	0.031	2W	0.046	0.156	0.015	0.074	0.037	
		4W	0.077	0.139	0.020	0.083	0.026	4W	0.058	0.083	0.011	0.112	0.047	
		6W	0.073	0.082	0.024	0.113	0.042	6W	0.092	0.041	0.005	0.130	0.069	
		8W	0.119	0.045	0.027	0.137	0.070	8W	0.136	0.018	0.000	0.149	0.094	
		10W	0.155	0.023	0.028	0.181	0.099	10W	0.150	0.005	-0.002	0.155	0.110	
		12W	0.165	0.013	0.027	0.154	0.117	12W	0.145	--	-0.003	0.101	0.121	
		14W	0.173	0.008	0.024	0.095	0.133	14W	0.140	-0.003	-0.005	0.041	0.110	
		16W	0.149	0.005	0.021	0.051	0.113	16W	0.099	-0.003	-0.005	0.016	0.071	
		18W	0.088	0.003	0.018	0.028	0.071	18W	0.054	-0.003	-0.006	0.003	0.034	
		20W	0.033	0.003	0.015	0.015	0.040	20W	0.025	-0.003	-0.005	-0.002	0.013	
		22W	0.028	0.002	0.013	0.008	0.020	22W	0.009	-0.002	-0.005	-0.005	0.001	
		24W	0.015	0.002	0.011	0.005	0.011	24W	0.003	-0.002	-0.005	-0.006	-0.003	
		26W	0.009	0.002	0.009	0.004	0.006	26W	--	-0.001	-0.005	-0.006	-0.006	
		28W	0.004	0.002	0.007	0.003	0.003	28W	--	-0.001	-0.004	-0.005	-0.005	
		30W	0.002	0.001	0.006	0.002	0.002	30W	--	--	-0.003	-0.004	-0.005	

(Continued)

(3 of 8 sheets)

Table A2(Continued)

Vertical Pressure, psi, at Indicated Cells											
Forward, Avg Speed = 1.89 mph						Reverse, Avg Speed = 1.47 mph					
Row	Position	Location	P ₆	P ₇	P ₈	Position	Location	P ₆	P ₇	P ₈	P ₉
10	1"W	16E	1.00	-0.18	--	5"W	16E	--	0.22	0.45	0.40
		14E	0.80	-0.20	--		14E	--	0.23	0.50	0.40
		12E	1.50	-0.20	--		12E	--	0.23	0.40	0.40
		10E	1.30	-0.10	--		10E	--	0.30	0.47	0.40
		8E	0.90	0.16	--		8E	--	0.57	0.60	0.48
		6E	1.40	0.58	--		6E	--	1.04	0.65	0.60
		4E	1.60	1.40	--		4E	--	2.03	0.65	0.86
		2E	1.50	2.68	--		2E	--	3.82	1.25	1.44
		A	99.60	4.56	--		A	124.80	6.00	2.10	2.21
		B	2.00	6.98	1.40		B	0.90	8.19	4.75	2.43
		C	2.60	8.52	5.20		C	1.60	9.50	7.80	4.96
		D	63.00	9.18	6.10		D	74.80	9.97	7.10	5.14
		E	118.80	9.61	4.65		E	118.60	10.32	5.80	5.78
		F	1.50	9.76	4.55		F	--	9.41	6.05	6.72
		G	1.70	7.54	7.85		G	--	7.09	7.05	7.01
		H	1.90	5.21	5.20		H	--	5.01	2.50	6.79
		I	1.00	3.40	1.15		I	--	3.82	0.30	5.97
		J	1.40	3.36	--		J	--	4.44	0.50	5.13
		K	75.50	4.70	--		K	84.40	6.04	1.35	4.52
		L	--	5.84	--		L	104.80	7.19	2.40	4.96
		M	7.00	7.06	0.85		M	4.95	8.20	4.10	4.71
		N	1.60	8.82	5.60		N	--	9.34	7.60	5.80
		2W	130.20	9.02	6.30		2W	130.40	10.07	6.30	6.02
		4W	2.60	9.08	4.85		4W	1.20	9.62	5.70	6.82
		6W	1.80	8.06	8.20		6W	--	7.58	7.35	7.86
		8W	1.70	5.07	6.60		8W	--	5.01	3.30	6.68
		10W	1.60	2.74	2.75		10W	--	2.86	0.15	5.43
		12W	1.40	1.31	0.40		12W	--	1.56	--	4.19
		14W	--	--	--		14W	--	0.84	--	2.90
		16W	--	0.24	--		16W	--	0.39	--	1.83
		18W	--	0.10	--		18W	--	0.14	--	1.12
		20W	--	0.06	--		20W	--	--	--	0.60
		22W	--	--	--		22W	--	--	--	0.86
		24W	--	--	--		24W	--	--	--	0.09
		26W	--	--	--		26W	--	--	--	-0.02
		28W	--	--	--		28W	--	--	--	-0.11
		30W	--	--	--		30W	--	--	--	-0.11

Vertical Deflection, in., at Indicated Cells											
Forward, Avg Speed = 1.89 mph						Reverse, Avg Speed = 1.47 mph					
Position	Location	D ₁	D ₂	D ₃	D ₄	Position	Location	D ₁	D ₂	D ₃	D ₄
10	1"W	16E	-0.040	-0.010	--	5"W	16E	0.001	0.008	0.007	--
		14E	-0.040	-0.010	--		14E	0.002	0.008	0.009	0.001
		12E	-0.040	-0.010	--		12E	0.003	0.013	0.013	0.002
		10E	-0.040	-0.010	--		10E	0.003	0.019	0.015	0.003
		8E	-0.040	-0.007	--		8E	0.004	0.027	0.019	0.002
		6E	-0.040	-0.001	--		6E	0.005	0.045	0.023	0.005
		4E	-0.040	0.014	--		4E	0.005	0.075	0.028	0.007
		2E	-0.040	0.041	--		2E	0.006	0.130	0.033	0.011
		A	-0.040	0.130	0.001		A	0.010	0.265	0.056	0.021
		B	-0.040	0.140	0.003		B	0.015	0.157	0.058	0.037
		C	-0.035	0.149	0.007		C	0.023	0.176	0.037	0.066
		D	-0.033	0.176	0.009		D	0.030	0.220	0.037	0.089
		E	-0.003	0.203	0.012		E	0.039	0.280	0.035	0.120
		F	-0.020	0.134	0.017		F	0.070	0.074	0.052	0.171
		G	0.004	0.078	0.022		G	0.119	0.045	0.088	0.169
		H	0.099	0.047	0.026		H	0.212	0.040	0.025	0.121
		I	0.140	0.038	0.027		I	0.164	0.056	0.026	0.173
		J	0.129	0.051	0.027		J	0.173	0.098	0.027	0.107
		K	0.219	0.131	0.026		K	0.210	0.176	0.029	0.056
		L	0.209	0.180	0.025		L	0.133	0.172	0.029	0.046
		M	0.153	0.174	0.026		M	0.086	0.137	0.028	0.045
		N	0.086	0.164	0.026		N	0.052	0.144	0.027	0.021
		2W	0.046	0.216	0.028		2W	0.048	0.166	0.023	0.120
		4W	0.034	0.165	0.032		4W	0.063	0.058	0.016	0.050
		6W	0.039	0.101	0.035		6W	0.010	0.017	0.010	0.135
		8W	0.100	0.060	0.038		8W	0.124	-0.010	0.004	0.158
		10W	0.185	0.033	0.039		10W	0.156	-0.024	--	0.152
		12W	0.162	0.020	0.036		12W	0.153	-0.029	-0.002	0.091
		14W	0.231	0.014	0.032		14W	0.207	-0.032	-0.003	0.037
		16W	0.192	0.011	0.028		16W	0.080	-0.032	-0.004	0.026
		18W	0.118	0.008	0.025		18W	0.027	-0.031	-0.004	-0.028
		20W	0.110	0.008	0.022		20W	--	-0.031	-0.004	-0.015
		22W	0.038	0.006	0.017		22W	-0.016	-0.030	-0.004	-0.017
		24W	0.023	0.007	0.015		24W	-0.023	-0.029	-0.004	-0.018
		26W	0.016	0.006	0.013		26W	-0.026	-0.029	-0.004	-0.017
		28W	0.011	0.006	0.011		28W	-0.026	-0.029	-0.004	-0.016
		30W	0.008	0.005	0.009		30W	-0.026	-0.029	-0.004	-0.016

(Continued)

(4 of 8 sheets)

Table A24(Continued)

Critical Pressure, psi, at Indicated Gages														
Forward, Avg Speed = 1.55 mph							Reverse, Avg Speed = 1.78 mph							
Row	Position	Location	6	7	8	9	10	Position	Location	6	7	8	9	10
11	0	20E	--	0.20	2.40	0.42	0.25	37S	20E	--	0.42	--	0.53	--
		10E	--	0.18	2.40	0.40	0.25		10E	--	0.44	--	0.58	--
		16E	--	--	2.40	0.56	0.25		16E	--	0.42	--	0.63	--
		14E	--	--	2.40	0.52	0.25		14E	--	0.35	--	0.60	--
		12E	--	--	2.40	0.49	0.25		12E	--	0.36	--	0.61	--
		10E	--	--	2.40	0.42	0.25		10E	--	0.38	--	0.59	--
		8E	--	0.16	2.40	0.44	0.25		8E	--	0.58	--	0.62	--
		6E	--	0.54	2.40	0.47	0.25		6E	--	0.94	--	0.72	--
		4E	--	1.21	2.40	0.63	0.25		4E	--	1.60	--	0.94	--
		2E	--	2.12	2.40	0.92	0.25		2E	--	2.98	0.40	1.37	--
		A	--	3.56	2.70	1.41	0.25		A	--	4.72	1.05	2.06	0.14
		B	--	5.17	3.00	2.05	0.56		B	--	6.52	2.60	2.87	0.40
		C	--	6.96	3.95	2.97	0.55		C	--	8.16	4.35	3.94	1.28
		D	19.80	7.72	5.50	3.48	0.55		D	8.10	8.92	4.50	1.46	2.12
		E	40.60	8.38	7.35	3.99	0.97		E	19.87	9.30	4.50	4.95	3.11
		F	--	8.64	13.40	5.08	1.21		F	--	8.80	7.05	5.84	5.70
		G	--	6.96	17.75	5.80	2.67		G	--	6.68	8.10	6.27	7.32
		H	--	4.64	26.20	6.05	1.86		H	--	4.52	3.05	5.96	9.92
		I	--	3.12	37.35	6.56	0.49		I	--	3.40	--	5.34	12.30
		J	--	2.76	27.45	4.82	0.25		J	--	3.60	--	4.59	7.60
		K	--	3.68	13.00	4.09	0.25		K	--	4.74	1.00	4.10	2.98
		L	--	4.70	8.30	7.87	0.25		L	--	5.70	1.45	4.07	1.96
		M	--	5.44	5.75	5.81	0.25		M	--	6.26	2.40	4.17	1.40
		N	--	7.08	4.25	4.06	0.25		N	--	7.76	4.15	4.58	1.42
		2W	21.90	8.29	6.30	4.54	0.37		2W	26.30	9.02	4.50	5.37	2.76
		4W	--	8.78	13.35	5.43	0.83		4W	--	8.72	5.90	5.88	5.12
		6W	--	7.20	18.90	6.07	2.31		6W	--	6.98	7.60	6.23	6.76
		8W	--	4.61	24.70	6.16	1.91		8W	--	4.64	4.10	5.95	8.80
		10W	--	2.40	35.75	5.52	0.45		10W	--	2.84	0.45	4.08	12.30
		12W	--	1.18	30.35	4.41	0.49		12W	--	4.52	--	3.89	8.68
		14W	--	0.42	14.45	3.74	-0.15		14W	--	0.70	--	2.29	3.82
		16W	--	0.14	5.45	2.4	-0.13		16W	--	0.28	--	1.81	1.66
		18W	--	--	2.40	1.20	-0.14		18W	--	--	--	1.17	0.62
		20W	--	--	1.40	0.66	-0.13		20W	--	--	--	0.69	0.20
		22W	--	-0.18	0.66	0.35	-0.15		22W	--	--	--	0.37	--
		24W	--	-0.18	0.35	0.20	-0.16		24W	--	--	--	0.18	--
		26W	--	0.12	0.20	0.10	-0.14		26W	--	--	--	0.09	--
		28W	--	--	0.10	0.06	-0.11		28W	--	--	--	-0.01	--
		30W	--	--	1.10	0.04	-0.10		30W	--	--	--	-0.01	--

Vertical Deflection, in., at Indicated Gages														
Forward, Avg Speed = 1.55 mph							Reverse, Avg Speed = 1.78 mph							
Position	Location	D ₁	D ₂	D ₃	D ₄	D ₅	Position	Location	D ₁	D ₂	D ₃	D ₄	D ₅	
11	0	20E	0.080	0.065	-0.002	-0.008	-0.006	37S	20E	--	0.003	0.009	0.003	0.002
		18E	0.080	0.065	-0.002	-0.008	-0.006		18E	0.001	1.075	0.011	0.004	0.003
		16E	0.080	0.065	-0.002	-0.008	-0.006		16E	0.001	2.004	0.013	0.005	0.003
		14E	0.080	0.065	-0.002	-0.008	-0.006		14E	0.004	0.006	0.016	0.005	0.004
		12E	0.080	0.065	-0.002	-0.008	-0.006		12E	0.004	0.009	0.017	0.006	0.005
		10E	0.080	0.065	-0.002	-0.008	-0.006		10E	0.005	6.013	0.021	0.007	0.005
		8E	0.080	0.067	-0.002	-0.008	-0.006		8E	0.005	0.023	0.025	0.008	0.005
		6E	0.080	0.075	-0.002	-0.008	-0.006		6E	0.005	0.042	0.029	0.009	0.006
		4E	0.080	0.091	-0.002	-0.007	-0.006		4E	0.005	0.073	0.034	0.010	0.007
		2E	0.080	0.114	-0.002	-0.006	-0.006		2E	0.006	0.122	0.036	0.015	0.008
		A	0.077	0.161	--	-0.004	-0.006		A	0.009	0.169	0.041	0.025	0.010
		B	0.078	0.171	0.003	-0.003	-0.005		B	0.011	0.171	0.042	0.043	0.014
		C	0.079	0.190	0.007	0.017	-0.002		C	0.015	0.174	0.042	0.074	0.023
		D	0.080	0.203	0.010	0.031	0.001		D	0.023	0.175	0.041	0.099	0.030
		E	0.081	0.206	0.013	0.051	0.005		E	0.028	0.162	0.039	0.127	0.040
		F	0.081	0.153	0.020	0.113	0.022		F	0.082	0.102	0.035	0.178	0.070
		G	0.102	0.098	0.026	0.144	0.049		G	0.082	0.066	0.031	0.181	0.109
		H	0.115	0.066	0.031	0.169	0.094		H	0.119	0.057	0.029	0.185	0.143
		I	0.130	0.070	0.033	0.136	0.123		I	0.141	0.073	0.029	0.172	0.149
		J	0.156	0.078	0.033	0.169	0.144		J	0.172	0.113	0.030	0.114	0.150
		K	0.217	0.128	0.031	0.096	0.154		K	0.181	0.164	0.031	0.065	0.189
		L	0.211	0.161	0.030	0.074	0.143		L	0.146	0.172	0.031	0.056	0.189
		M	0.169	0.161	0.030	0.058	0.124		M	0.105	0.159	0.031	0.023	0.087
		N	0.110	0.176	0.030	0.047	0.080		N	0.061	0.168	0.028	0.068	0.056
		2W	0.075	0.174	0.033	0.067	0.094		2W	0.055	0.150	0.024	0.114	0.052
		4W	0.095	0.154	0.037	0.124	0.047		4W	0.058	0.100	0.018	0.165	0.065
		6W	0.088	0.097	0.041	0.169	0.067		6W	0.080	0.057	0.012	0.167	0.097
		8W	0.071	0.053	0.041	0.175	0.107		8W	0.113	0.050	0.006	0.165	0.189
		10W	0.115	0.087	0.043	0.102	0.138		10W	0.141	0.014	0.002	0.161	0.136
		12W	0.136	0.083	0.041	0.115	0.154		12W	0.166	0.01	--	0.106	0.135
		14W	0.187	0.008	0.037	0.113	0.163		14W	0.1	0.007	--	0.047	0.118
		16W	0.165	0.002	0.031	0.081	0.135		16W	0.1	0.006	--	0.016	0.076
		18W	0.097	--	0.027	0.032	0.083		18W	0.04	0.00	--	0.001	0.036
		20W	0.056	--	0.022	0.018	0.053		20W	0.041	0.003	--	-0.005	0.012
		22W	0.032	-0.001	0.018	0.010	0.030		22W	0.030	0.008	--	-0.008	-0.001
		24W	0.018	-0.001	0.015	0.005	0.017		24W	0.022	0.008	--	-0.008	-0.008
		26W	0.012	-0.002	0.012	0.003	0.011		26W	0.020	0.009	--	-0.008	-0.010
		28W	0.008	-0.002	0.010	0.002	0.007		28W	0.020	0.009	--	-0.007	-0.010
		30W	0.005	-0.002	0.008	--	0.005		30W	0.020	0.009	--	-0.007	-0.013

(Continued)

(5 of 8 sheets)

Table A21 (Continued)

Vertical Pressure, psi, at Indicated Cells													
Forward, Avg Speed = 1.91 mph							Reverse, Avg Speed = 1.89 mph						
Row	Position	Location	P ₆	P ₇	P ₈	P ₉	Position	Location	P ₆	P ₇	P ₈	P ₉	P ₁₀
13	1" W	24E	0.40	0.50	1.60	0.37	6" S	24E	0.30	0.47	0.10	0.25	0.03
		22E	0.40	0.61	1.60	0.46		22E	0.20	0.55	0.15	0.30	0.05
		20E	0.40	0.61	1.55	0.59		20E	0.20	0.64	0.15	0.40	0.07
		18E	0.40	0.49	1.55	0.68		18E	0.20	0.60	0.20	0.54	0.10
		16E	0.40	0.35	1.50	0.73		16E	0.20	0.53	0.25	0.56	0.21
		14E	0.40	0.16	1.50	0.72		14E	0.10	0.43	0.30	0.54	0.29
		12E	0.40	--	1.40	0.64		12E	0.10	0.37	0.30	0.47	0.32
		10E	0.40	--	1.40	0.53		10E	--	0.40	0.30	0.41	0.36
		8E	0.40	0.11	1.35	0.45		8E	0.20	0.55	0.35	0.39	0.30
		6E	0.40	0.39	1.35	0.45		6E	0.30	0.88	0.40	0.40	0.27
		4E	0.40	0.92	1.50	0.54		4E	0.40	1.46	0.60	0.56	0.26
		2E	0.40	1.65	1.70	0.74		2E	0.50	2.43	1.10	0.86	0.26
		A	0.40	2.68	1.95	1.09		A	0.50	3.74	1.80	1.40	0.38
		B	0.40	3.89	2.30	1.60		B	0.60	5.10	3.00	2.05	0.60
		C	0.40	5.21	2.65	2.08		C	0.90	6.48	3.80	2.89	1.16
		L	1.60	5.84	2.80	2.66		D	5.90	7.09	4.20	3.31	1.57
		E	1.30	6.80	2.90	3.02		E	11.55	7.63	4.70	3.73	2.09
		F	--	6.68	4.75	3.83		F	6.00	7.48	7.60	4.49	3.41
		G	--	5.47	6.80	4.30		G	1.50	5.74	8.05	4.88	5.06
		H	--	3.96	4.60	4.61		H	1.40	4.06	2.90	4.78	7.85
		I	--	2.72	1.90	4.18		I	1.70	3.12	0.75	4.23	9.76
		J	--	2.45	1.05	3.74		J	1.60	3.19	0.70	3.64	6.05
		K	--	2.96	0.95	3.20		K	1.50	3.93	1.30	3.22	2.80
		L	--	3.57	1.00	3.10		L	1.40	4.54	1.95	3.20	1.95
		M	--	4.17	1.30	3.02		M	1.40	5.20	2.50	3.30	1.60
		N	--	5.38	1.75	3.13		N	1.40	6.32	3.45	3.65	1.39
		2W	1.80	6.52	2.00	3.60		2W	9.60	7.78	4.25	4.23	2.02
		4W	--	6.93	3.30	4.16		4W	1.00	7.42	6.55	4.69	3.10
		6W	--	5.85	6.40	4.62		6W	1.50	6.03	8.40	5.04	4.50
		8W	--	3.90	5.00	4.77		8W	1.50	4.11	3.70	4.82	6.98
		10W	--	2.24	1.95	4.27		10W	1.90	2.51	0.90	4.14	9.79
		12W	--	1.25	0.75	3.48		12W	1.50	1.49	0.50	3.20	6.70
		14W	--	0.65	0.25	2.52		14W	1.50	0.84	0.50	2.30	3.40
		16W	--	0.33	--	1.67		16W	1.65	0.49	0.50	1.50	1.71
		18W	--	0.16	--	1.02		18W	1.60	0.32	0.50	0.98	0.87
		20W	--	0.07	--	0.58		20W	1.60	0.22	0.60	0.57	0.56
		22W	--	0.04	--	0.31		22W	1.60	0.19	0.60	0.35	0.40
		24W	--	--	--	0.16		24W	2.10	0.15	0.60	0.18	0.36
		26W	--	--	--	0.08		26W	2.00	0.18	0.60	0.10	0.33
		28W	--	--	--	--		28W	2.00	0.17	0.60	0.05	0.37

Vertical Deflection, in., at Indicated Gages													
Forward, Avg Speed = 1.91 mph							Reverse, Avg Speed = 1.89 mph						
Position	Location	D ₆	D ₇	D ₈	D ₉		Position	Location	D ₆	D ₇	D ₈	D ₉	
13	1" W	24E	-0.048	0.002		-0.012	6" S	24E	0.003	--		0.001	
		22E	-0.048	0.002		-0.012		22E	0.00	--		0.001	
		20E	-0.048	0.002		-0.012		20E	0.003	--		0.001	
		18E	-0.048	0.002		-0.012		18E	0.004	--		0.002	
		16E	-0.049	0.002		-0.012		16E	0.004	--		0.002	
		14E	-0.049	0.002		-0.012		14E	0.005	--		0.002	
		12E	-0.049	0.002		-0.012		12E	0.008	--		0.003	
		10E	-0.048	0.002		-0.012		10E	0.011	--		0.003	
		8E	-0.044	0.002		-0.012		8E	0.020	--		0.004	
		6E	-0.037	0.001		-0.012		6E	0.036	--		0.004	
		4E	-0.022	-0.003		-0.012		4E	0.065	0.003		0.004	
		2E	0.006	0.006		-0.013		2E	0.113	0.005		0.005	
		A	0.109	0.009		-0.012		A	0.186	0.010		0.007	
		B	0.120	0.010		-0.012		B	0.141	0.018		0.011	
		C	0.127	0.016		-0.008		C	0.162	0.028		0.019	
		D	0.155	0.020		-0.005		D	0.183	0.031		0.025	
		E	0.179	0.023		-0.001		E	0.161	0.047		0.034	
		F	0.115	0.029		0.013		F	0.059	0.032		0.058	
		G	0.064	0.030		0.039		G	0.032	0.028		0.091	
		H	0.033	0.025		0.073		H	0.028	0.017		0.115	
		I	0.025	0.013		0.099		I	0.044	0.011		0.123	
		J	0.038	0.008		0.116		J	0.054	0.012		0.124	
		K	0.119	0.010		0.123		K	0.158	0.011		0.109	
		L	0.176	0.012		0.115		L	0.149	0.013		0.090	
		M	0.163	0.013		0.100		M	0.103	0.016		0.073	
		N	0.155	0.018		0.063		N	0.122	0.023		0.046	
		2W	0.202	0.024		0.042		2W	0.134	0.023		0.041	
		4W	0.155	0.030		0.039		4W	0.090	0.027		0.052	
		6W	0.094	0.034		0.055		6W	-0.009	0.024		0.078	
		8W	0.053	0.028		0.088		8W	-0.034	0.015		0.104	
		10W	0.029	0.014		0.112		10W	-0.049	0.005		0.111	
		12W	0.016	0.008		0.126		12W	-0.054	0.004		0.112	
		14W	0.010	0.006		0.133		14W	-0.056	0.003		0.098	
		16W	0.006	0.004		0.112		16W	-0.057	0.001		0.063	
		18W	0.005	0.002		0.076		18W	-0.057	--		0.029	
		20W	0.004	0.002		0.046		20W	-0.056	--		0.008	
		22W	0.003	0.001		0.026		22W	-0.056	--		-0.003	
		24W	0.003	--		0.014		24W	-0.056	--		-0.008	
		26W	0.003	--		0.008		26W	-0.056	--		-0.011	
		28W	0.002	--		0.005		28W	-0.055	--		-0.012	

(Continued)

• Not working.

(6 of 8 sheets)

Table A21 (Continued)

Vertical Pressure, psi, at Indicated COL															Vertical Pressure, psi, at Indicated COL														
Forward, Avg Speed = 1.83 mph															Reverse, Avg Speed = 1.83 mph														
Row	Position	Location	6	7	8	9	10	Position	Location	6	7	8	9	10	Position	Location	6	7	8	9	10	Position	Location	6	7	8	9	10	
15	0	30E	0.08	0.45	1.46	0.89		None	32E	--	0.11	0.06	0.10																
		28E	0.08	0.55	1.44	0.75			30E	--	0.24	0.08	0.16																
		26E	0.08	0.79	1.46	0.42			28E	--	0.30	0.10	0.17																
		24E	0.06	0.99	1.46	0.48			26E	--	0.63	0.10	0.27																
		22E	0.02	1.37	1.38	0.63			24E	--	1.10	0.17	0.42																
		20E	--	1.53	1.12	0.80			22E	--	1.57	0.15	0.61																
		18E	0.02	1.38	1.00	0.97			20E	--	1.67	0.17	0.83																
		16E	--	1.00	0.82	1.09			18E	--	1.29	0.56	1.00																
		14E	--	0.68	0.63	1.09			16E	0.05	0.76	0.48	1.03																
		12E	--	0.50	0.41	1.00			14E	0.05	0.38	0.60	0.91																
		10E	--	0.36	0.34	0.85			12E	0.04	0.13	0.84	0.69																
		8E	0.02	0.37	0.34	0.72			10E	0.04	0.04	0.94	0.48																
		6E	0.02	0.52	0.30	0.64			8E	0.04	0.06	0.94	0.31																
		4E	0.29	0.88	0.40	0.66			6E	0.04	0.28	0.96	0.33																
		2E	0.14	1.38	0.54	0.78			4E	0.07	0.52	1.06	0.35																
		A	0.16	2.09	0.74	1.04			2E	0.16	0.93	1.20	0.48																
		B	0.15	2.87	1.01	1.40			A	0.19	1.47	1.40	0.70																
		C	0.01	3.73	1.37	1.88			B	0.25	2.19	1.68	1.07																
		D	--	4.07	1.56	2.12			C	0.20	3.00	1.96	1.57																
		E	--	4.39	1.78	2.41			D	0.19	3.29	2.12	1.79																
		F	0.06	4.49	2.26	2.92			E	0.14	3.50	2.26	2.04																
		G	0.10	3.82	2.24	3.18			F	0.08	3.64	2.70	2.55																
		H	0.07	2.93	1.52	3.42			G	0.10	3.14	2.60	2.88																
		I	0.08	2.12	0.74	3.22			H	0.15	2.42	1.96	2.88																
		J	0.09	1.96	0.41	2.88			I	0.15	1.78	1.34	2.71																
		K	0.10	2.33	0.45	2.55			J	0.16	1.72	1.08	2.44																
		L	0.11	2.68	0.50	2.46			K	0.22	2.11	1.14	2.20																
		M	0.11	3.04	0.64	2.42			L	0.26	2.43	1.20	2.15																
		N	--	3.94	1.03	2.56			M	0.29	2.74	1.40	2.17																
		2W	-0.05	4.60	1.40	2.91			N	0.30	3.56	1.72	2.37																
		4W	--	4.73	1.94	3.30			2W	0.27	4.00	2.02	2.69																
		6W	0.10	4.10	2.34	3.63			4W	0.24	4.11	2.46	3.06																
		8W	0.08	2.92	1.72	3.66			6W	0.22	3.59	2.60	3.30																
		10W	0.05	1.75	0.86	3.30			8W	0.25	2.76	2.00	3.32																
		12W	0.03	0.98	0.39	2.73			10W	0.24	1.76	1.32	2.96																
		14W	0.02	0.51	0.12	1.99			12W	0.20	1.08	1.03	2.42																
		16W	0.02	0.25	--	1.32			14W	0.18	0.58	0.96	1.73																
		18W	0.02	0.12	--	0.84			16W	0.18	0.31	0.96	1.21																
		20W	0.02	0.07	--	0.49			18W	0.18	0.15	1.00	0.77																
		22W	0.02	0.03	--	0.26			20W	0.18	0.07	0.98	0.50																
		24W	0.02	0.01	--	0.15			22W	0.17	0.05	1.00	0.30																
		26W	0.01	--	--	0.08			24W	0.18	0.03	1.02	0.19																
		28W	0.01	--	--	0.04			26W	0.18	0.03	1.04	0.12																
		30W	--	--	--	0.02			28W	0.17	0.04	1.06	0.08																
		32W	--	--	--	0.01			30W	0.16	0.04	1.06	0.06																
									32W	0.18	0.04	1.12	0.05																

(Continued)

• Data not record.

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Table A21(Concluded)

Vertical Deflection, in., at Indicated Gages													
Forward, Avg Speed = 1.65 mph							Reverse, Avg Speed = 1.53 mph						
Row	Position	Location	D ₆	D ₇	D ₈ ^a	D ₉	Position	Location	D ₆	D ₇	D ₈ ^a	D ₉	
15	0	30E	0.019	0.004		-0.012	None	32E	0.001	-0.001		--	
		28E	0.019	0.004		-0.012		30E	0.002	-0.001		--	
		26E	0.019	0.004		-0.012		28E	0.002	-0.002		--	
		24E	0.019	0.004		-0.012		26E	0.003	-0.001		--	
		22E	0.019	0.004		-0.012		24E	0.004	--		--	
		20E	0.019	0.004		-0.012			22E	0.004	--		--
		18E	0.019	0.004		-0.012			20E	0.005	--		0.001
		16E	0.018	0.004		-0.012			18E	0.006	--		0.001
		14E	0.018	0.004		-0.012			16E	0.007	--		0.002
		12E	0.018	0.003		-0.012			14E	0.008	--		0.002
		10E	0.019	0.002		-0.012			12E	0.012	--		0.003
		8E	0.022	0.002		-0.012			10E	0.019	--		0.003
		6E	0.031	0.003		-0.012			8E	0.030	--		0.003
		4E	0.048	0.005		-0.013			6E	0.050	0.001		0.003
		2E	0.077	0.008		-0.013			4E	0.083	0.004		0.004
		A	0.130	0.009		-0.013			2E	0.132	0.010		0.006
		B	0.153	0.010		-0.011			A	0.181	0.019		0.006
		C	0.162	0.020		-0.008			B	0.164	0.029		0.008
		D	0.182	0.025		-0.005			C	0.168	0.042		0.021
		E	0.106	0.029		-0.001			D	0.169	0.045		0.028
		F	0.138	0.038		0.015			E	0.151	0.046		0.038
		G	0.088	0.040		0.024			F	0.084	0.044		0.067
		H	0.058	0.033		0.082			G	0.051	0.036		0.105
		I	0.052	0.019		0.108			H	0.043	0.025		0.117
		J	0.073	0.010		0.126			I	0.062	0.015		0.129
		K	0.125	0.009		0.132			J	0.104	0.014		0.131
		L	0.148	0.011		0.122			K	0.164	0.016		0.113
		M	0.157	0.014		0.106			L	0.167	0.019		0.095
		N	0.171	0.024		0.067			M	0.152	0.024		0.076
		2W	0.187	0.034		0.045			N	0.150	0.033		0.048
		4W	0.150	0.044		0.042			2W	0.146	0.038		0.042
		6W	0.096	0.046		0.061			4W	0.071	0.036		0.056
		8W	0.055	0.039		0.095			6W	0.024	0.032		0.084
		10W	0.029	0.022		0.121			8W	-0.002	0.021		0.112
		12W	0.016	0.012		0.136			10W	-0.019	0.007		0.120
		14W	0.009	0.008		0.142			12W	-0.026	0.004		0.117
		16W	0.005	0.005		0.120			14W	-0.028	0.003		0.101
		18W	0.004	0.003		0.090			16W	-0.029	0.002		0.064
		20W	0.003	0.002		0.048			18W	-0.029	0.001		0.026
		22W	0.002	0.001		0.027			20W	-0.028	--		0.073
		24W	0.002	0.001		0.015			22W	-0.027	--		-0.010
		26W	0.002	0.001		0.009			24W	-0.027	--		-0.016
		28W	0.001	0.001		0.006			26W	-0.026	--		-0.018
		30W	0.001	0.001		0.004			28W	-0.026	--		-0.019
		32W	0.001	0.001		0.003			30W	-0.026	--		-0.019
									32W	-0.026	--		-0.019

* Did not record.

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The three columns give the static row number, the assembly load point on that row, and the location of the static load for the indicated cell or gage reading. Figure A1 shows the locations of the loading points for each wheel assembly; figures A2 and A3 show the locations of the static loads for items 3 and 4, respectively.

For example, the heading of table A-14 indicates that this table contains static load test data for the 12-wheel assembly at 30,000 lb per wheel on item 3; therefore, figures A1 and A2 are to be used in conjunction with the table. Look down the right side under column heading row until rows 1 and 3, load points 1 and 2, and location G are located. This identification means that with the 12-wheel assembly over location G, assembly load point 1 is on static row 1 and assembly load point 2 is on static row 3. Figure A2 shows that soil pressure cell P1 (4.5-ft depth) is located on static row 1 at location G. Thus the values of total and rebound pressure for cell P1 represent the maximum static load pressure values at a depth of 4.5 ft for assembly load point 1 under a load of 30,000 lb per wheel or a total load of 360,000 lb. The other pressure cell values across the table on this line represent pressure measurements offset from assembly load point 1. Figure A2 shows no pressure cell at the location of assembly load point 2 on static row 3; therefore, all of the values across the table on this line represent offset pressure values for load point 2. These offset pressure values are the same for both assembly load points 1 and 2; however, the offset distances for the pressure values differ for the two load points. The above discussion also applies to the static load deflections at the bottom of the table. At location G, figure A2 shows that no deflection gages exist at assembly load points 1 and 2 on static rows 1 and 3, respectively; therefore, all deflection values across the table on this line represent offset deflection values for the load points. These offset deflections, as for the pressures, are the same values for both assembly load points, but the offset distances from the load points are different. All offset distances from the assembly load points can be calculated or else measured directly from figure A1 and figure A2 or A3.

The dynamic loading test data are given in tables A-16 through A-21. These tables are slightly different from the static test data tables. No total or rebound values could be given for the dynamic load data, and only one response value was obtained; this value and how it was determined will be discussed

later. Each table gives data for only one item; vertical pressures and vertical deflections, respectively, are given in the top and bottom half of the table. A table for a specific item under specific load conditions will not always include both pressures and deflections for a dynamic row. For the outside instrumented pressure and deflection rows (dynamic rows 5 and 15) and depending on the wheel assembly, for dynamic rows 7 and 13, both measurements of pressure and deflection on these rows were not always determined from the oscillograph recordings. In reducing the oscillograph records, the main information extracted, due to time limitations, was the maximum instrumentation responses, which is why only the main instrumented rows were analyzed. These tables give the induced instrumentation responses for both forward and reverse runs and the average speed in miles per hour for each.

Additional information to be used in conjunction with figures A1 and A4 and the appropriate figure A2 or A3 is listed to the left of each block of data for forward and reverse runs. This additional information consists of the dynamic row number on the left side of the figure for both runs (the dynamic row numbers are identified in figure A4). Only one row number is given, which is different from the tables for static tests because as explained in the main report, assembly load point 1 was always the guiding point. For both forward and reverse runs, position and location columns are given. The position column gives the position north or south that load point 1 was offset from the row at each location. As an example, an indication of 1"N means load point 1 was 1 in. off on the north side of the row; therefore, the assembly load point was 1 in. north from the center of a cell or gage if the location was within the instrumentation grid (A through N). An indication, under position, of 0 indicates assembly load point 1 was centered on the row.

The location column is the same as the locations for the static load tests; except for the dynamic load tests, data were extracted from the recordings for several feet along the row being run before and after the load cart traversed the instrumentation grid (A through N) in each item. For example, a designation of 10E in the location column would identify data recorded 10 ft east of the first grid system location (A) on the row indicated in the first column of the table; 10W would identify a similar location 10 ft west of the last grid location (N).

The positions listed in the tables apply specifically to load point 1,

but for load point 2 of all the assemblies, these positions are also true, as discussed under major testing program. As an example, if the table lists at a location a position of 2"S for dynamic row 7, then assembly load point 1 is 2 in. south of the center of row 7, and assembly load point 2 is 2 in. south of the center of dynamic row 5. For the locations, the location applies specifically to assembly load point 1; and for all assemblies except the single-wheel and the twin-tandem assemblies, these locations also apply to load point 2. There was no second load point for single-wheel tests. Load point 2 of the twin-tandem assembly is offset 29 in. behind load point 1. For this reason, when using the dynamic test data tables of the twin-tandem tests, this offset (29 in. behind) must be considered. As an example, for the twin-tandem assembly, if for dynamic row 7 the location is listed as F, then the maximum response for load point 2 would be at location E on a forward run; however, it would be at location G on a reverse run. As an example for the other assemblies, if the location of dynamic row 7 was F, this would be the location for load point 1 on row 7 and the location of load point 2 on either dynamic row 5 or 9 (refer to figures A1 and A4).

Use of the dynamic load data tables is the same as that previously described for the static load tables. The dynamic load data presented in this appendix are the best of two or more runs on a row if more than one run under an assembly was necessary, as discussed in the main report.

For both static and dynamic load tables presented, minus values will be noticed throughout the tabulated data responses. These minus values indicate that the instrument responses under both static and dynamic load tests were above the reference (which was discussed in the main report) used for the particular gage or cell, but negative values do not mean that the gage or cell actually responded in a negative direction. Positive values always indicate increases in vertical pressure or downward vertical deflection. As will be noticed in the tabulated data, the minus values occur at large offset distances from a gage or cell; therefore, they may be assumed to represent a shift in the zero reference for the gage or cell. This is not an electrical zero shift in the gage or cell but is actually a shift in the soil behavior. The reference for each gage and cell was discussed in detail in the main report. If the data presented are to be used to develop stress or deflection basins at various depths under loads, all of the data, including minus values,

should be plotted to the fullest offsets given and then the zero reference should be shifted to the top of the curves. This procedure would eliminate the minus values and give a truer basin curve representing the basin generated beneath a loaded assembly.

In addition to tests conducted with the loaded assemblies, both static and dynamic load tests were conducted with the empty assembly movers. These data are not presented in this appendix, but an analysis is presented in the main text of this volume. The 12-wheel prime mover, even though it had a large deadweight, did not have an effect on the gages or cells for the static load tests because of the wide wheel spacing. Neither did it have an effect on the dynamic tests; however, it did affect the dynamic load data recorded for the outside dynamic rows (see figure A4). The twin-tandem prime mover affected both the static and dynamic load data because the spacing of the outrigger wheels was much closer than that on the 12-wheel mover. Table A-22 gives the effects and, consequently, the corrections to be applied to the

Table A-22
Corrections Due To Prime Mover To Be Applied to
All Twin-Tandem Maximum Deflections for
MWHGL Flexible Pavement Tests

<u>Item</u> <u>No.</u>	<u>Depth</u> <u>ft</u>	<u>Correction</u> <u>Point 1, in.</u>	<u>Correction</u> <u>Point 2, in.</u>
3	0.00	0.002	0.003
	0.75	0.002	0.003
	2.75	0.002	0.002
	4.50	0.001	0.002
	7.50	0.001	0.001
	12.00	0.000	0.000
4	0.00	0.006	0.007
	0.75	0.006	0.007
	2.75	0.005	0.006
	4.50	0.004	0.004
	7.50	0.001	0.002
	12.00	0.001	0.001

static test data of all twin-tandem loads. No effects on the soil pressure cells were discernible (this was discussed in the main report). This table lists only the deflection corrections for each depth immediately under each load point and not offset corrections (only zero offset for each point). Corrections of the dead-load effect of the twin-tandem mover for dynamic load tests were not tabulated or presented. The single-wheel mover was very light and had no effects on either static or dynamic load data. The above corrections must be applied when utilizing any static load test data, since the data presented were not corrected for these effects.

Another very important correction that must be applied to all of the static load deflection data is the 12-ft-depth reference plane induced movements under load. Figure A5 gives these corrections for each load and assembly for both the maximum values and offset values. The development of these 12-ft-depth movement curves was fully discussed in the main report. These corrections must be added to every deflection gage movement at all depths under static loading conditions. The static load data presented in the data tables were not corrected for this movement.

3. DEFLECTIONS

a. Static Load Tests

The initial reduction of the static load deflection data is presented in the data tables. Induced movements for each load and assembly were calculated by taking the difference between the load and no-load readings before and after the load tests. This yielded the total and rebound values. The total deflection values are the differences between load and initial no-load readings; therefore, they represent the total movement that occurred under load. This total movement consists of two parts: one part is permanent deformation, which is not recoverable, and the other part is elastic deflection or the recoverable part. The rebound values are the differences between the load and the final no-load readings; therefore, these values are a representation of all or a portion of elastic or recoverable deflection. Permanent deformation is represented by the difference between the total and the rebound values. The rebound value and its difference from the total value represent the elastic and permanent deflections, respectively, if and only if no residual deflections or strains occurred under the loadings. The analysis and establishment of a zero reference for each gage were discussed in the main

text. The data as determined from this analysis were used and not the data from the initial reduction presented in the tables. However, the rebound values in the tables are close to the values determined from the analysis.

b. Dynamic Load Tests

Only one value is given in the data tables for the responses of each gage on the forward and reverse runs of the dynamic load tests. This value corresponds closely to the maximum elastic values determined for the static load tests, using the procedures discussed in the main report. Basically, the reduction of the dynamic load response data was the same and had the same associated problems as the static load data.

The first step in the reduction of data was to establish the zero or no-load reference from which each deflection gage was responding. Behavior of the soil during dynamic loading was discussed in the main report. Based on the behavior exhibited during the dynamic and static load tests and to be consistent with the analysis of the static load data, a reference was chosen that would be comparable to the static load test data reference. The delayed rebound reference level was chosen for the static load tests, and, consequently, the reference level was chosen for the dynamic load tests after the gages had been passed over in a dynamic run. This reference level represents the immediate elastic rebound value; however, the delayed rebound did not appear to be as large, if it existed at all, as that for the static tests.

On an oscillograph record for a gage, a trace was made by the gage which represented the no-load condition. As the gage was approached by a moving loaded assembly, this line began to register deflection and reached a maximum deflection as the load passed over the gage location. The line rose as the loaded assembly moved away from the gage and came back to a position that was usually below the starting no-load condition. This trace then represented the unloaded condition.

In order to determine the offset values parallel to the direction of travel and the maximum response, the instrumentation grid pattern was first drawn onto the oscillograph record using the photocell blips as discussed in Volume III-A. Next, a horizontal reference was drawn tangent to the unloaded trace at a distance back from the grid pattern where the line stopped rising. The scale of each deflection gage was determined from calibration steps put

on the records, as discussed in Volume III-A under major testing program. The scale at which the particular deflection gage was operated was set on a variable-scale ruler and the responses of the gage at each offset, including zero offset, from the reference line were read directly in inches of deflection. This procedure was followed for each deflection gage, and the responses measured represent elastic deflection very close to the maximum elastic deflection as determined for the static test data. These are the values presented in the data tables. An example of an oscillograph record with the superimposed grid pattern and reference line is shown in figure 28 of Volume III-A.

4. STRESSES

a. Static Load Tests

The initial reduction of vertical stress measurements is presented in the data tables. Induced stresses for each load and assembly were calculated by taking the difference between the load and the no-load readings before and after the load tests. This resulted in total and rebound values. The total values are the differences between load and initial no-load readings. Rebound values are the differences between the load and the final no-load readings; therefore, these values represent a portion or all of the elastic recoverable stress. The difference between the values of total stress and rebound represents the residual stress locked in the soil. The tabulated initial reduction of stress data was not the data used in the main report results. The data used came from the analysis and establishment of zero references for each pressure cell as discussed in the main report.

b. Dynamic Load Tests

Only one value is given in the data tables for the response of each pressure cell on the forward and reverse runs of the dynamic load tests. These values correspond closely to the maximum elastic stresses determined for the static load tests from the analysis in the main text. The analysis of the dynamic load tests was basically the same as the analysis of the static load tests with respect to initial no-load reference and corrections.

To be consistent with the analyses of the static load stress data and the dynamic load deflection measurements, the reference datum for each pressure cell was taken as a horizontal line tangent to the cell's unloaded trace

at the point where the cell trace stopped rising after a load passed over it. This was the same procedure followed for determining the dynamic load deflection responses. The horizontal reference for each cell was drawn along with the deflection reference after the instrumentation grid was superimposed on the record of a run. This cell reference represented the elastic stress reference datum for the cell.

Once the reference for a cell was established, the scale of the pressure cell was set on a variable-scale ruler. The pressure cell scale was determined from the calibration steps on the record, as previously discussed in the main text. The cell responses were read from the reference line directly in psi of pressure at each offset as determined by the grid. These measured values of vertical elastic stress are very close to those determined for the static load tests and are the values presented in the dynamic load tables.

SECTION II

EVALUATION OF MEASURING INSTRUMENTS

Due to the great volume of static and dynamic load data used for the MATHGL analysis and the data to be used for future analysis, with respect to actual soil behavior, some of the factors affecting accuracy of the test results will be discussed in this appendix of the report on instrumentation. Accuracy, as used in this report, applies to the ability of the soil instrumentation to properly reflect the existing conditions in and behavior of the soil within which the measuring instrument is buried (or conditions and behavior which would exist with the device absent). Also, an attempt will be made to convey an idea of the consistency and reproducibility of the instrument readings. No special tests were performed to evaluate the instrumentation responses; therefore, the evaluation will be made utilizing actual data taken during load tests as well as previous work done for this purpose with some of the instruments. Lastly, in this part of the appendix the loss of instrumentation and the probable causes will be presented.

1. ACCURACY

Accuracy is the degree to which the results from instruments as installed compare to what the results would have been if the instruments had not been in the soil. Therefore, accuracy is a measure of the disturbance of the conditions and behavior caused by the presence of an instrument in the system. Accuracy, as stated above, is difficult to evaluate because the only known value is of the system responding with the instrument present; how the system would behave without the instrument is unknown. If the actual behavior or response were a known fact, then there would be no need to instrument the system to measure the responses. Thus, the fact is evident that accuracy cannot be evaluated; only an indication of accuracy can be evaluated based on theoretical and other concepts.

a. Soil Pressure Cells

A pressure cell constructed of metal or some similar rigid material, and necessarily constructed to obey Hooke's law in its compressibility, can be expected to alter the stress distribution in soil, resulting in a concentration of stress in the vicinity of the cell in the same manner that a large

stone will concentrate stresses in a sand or plastic soil mass. Theoretically, a very thin, compressible (but not flexible) plate will distort the stress pattern in the soil very slightly. This suggests a cylindrical cell that is thin in proportion to its diameter. The probable existence of anomalous local stress variations, due to lack of complete homogeneity in the soil, indicates the need for a large pressure response area in a pressure cell. The concentration of stress by a pressure cell would be expected to depend greatly on its compressibility; therefore, if its compressibility were less than that of the soil, indicated pressures would probably be higher than true pressures. In reverse, if the cell compressibility were higher than that of the soil, arching action (at least in granular soils) might be expected to withhold an appreciable portion of the normal stress from the cell; as a result, indicated pressures would probably be lower than true pressures.

A few factors affecting the accuracy of all soil pressure cells under field conditions are error parameters of effects, such as eccentric loading, unmatching compressibility, and the technique of cell installation. The modulus of the soil in which the cell is embedded may be either larger or smaller than the modulus of the cell, therefore causing a distortion of the stress pattern in the immediate vicinity of the pressure cell and possibly causing a source of error. Another limitation of soil pressure cells is the stability with time, which is determined by cell design and craftsmanship. Such possible changes are resistance changes in the gage wires, imperfect temperature compensation, and variations of the elastic constants of the cell material. A discussion of error factors can be found in reference 5.

As reported in reference 5, laboratory tests performed under controlled conditions have repeatedly demonstrated the ability of the WES pressure cell to yield results of an overall accuracy of ± 0.5 percent of full-load pressure. The SR-4 strain gage itself has an accuracy of approximately 0.1 percent, and the balance of the inaccuracy is accounted for by gage bonding, imperfect diaphragm performance, mechanics of the flexural ring, and fluid transfer cavity behavior. This degree of accuracy is reduced when the cell is installed under actual field conditions and when the factors discussed previously are in action on the cell.

In a study of stress distribution using WES pressure cells in a mass of homogeneous sand (reference 6), the data were rigorously examined for

determinations of cell performance. This study analyzed the variability of individual readings, which will be discussed later, and made comparisons of actual soil conditions with theoretical soil conditions by the consideration of stresses on mutually perpendicular planes and free-body force summations. The general conclusion in this study based upon the variability of readings and the theoretical comparisons was that the WES pressure cells were accurate to within 10 percent or better.

For the accuracy of the commercial SA-E soil pressure cell, only the manufacturer's specifications could be used. No laboratory tests other than calibration tests and no prior field experience with the cells were available for determining the accuracy. Manufacturer's specifications were as follows:

Linearity at full scale (measured in air)	0.5%
Hysteresis at full scale (measured in air)	0.5%
Temperature effect on sensitivity, per deg	0.8%

For a measure of stability, the manufacturer reported that no drift was noted after six weeks of testing in moist soil. The accuracy of the SA-E cells would appear to be about 0.5 percent, but as will be discussed later, this degree of accuracy was greatly reduced (more than in the WES cells) when the cells were installed in the field with all of the previously discussed factors acting on the cells.

b. Pore Pressure Cells

The WES pore pressure cell is distinguished from the earth pressure cells principally by the fact that the liquid pressures act directly on the measuring diaphragm. Critical diameter-thickness considerations governing the design of earth pressure cells are not important for pore pressure cells. Thickness of the cell is based on space requirements of the transducer assembly, and the diameter is governed by conditions of use.

The cells are embedded in a pocket of sand, particularly in clayey soils, which is placed in the drill hole just prior to installation of the cell. Particular care with preparatory measures and installation procedures is necessary to avoid trapping air between the porous stone and the diaphragm of the cell. Entrapped air would cause erroneous indications with loss of low-pressure response.

Pore pressure readings accurate within 0.5 percent are readily obtainable by observing the precautions and practices applicable to installation and use of all pressure cells. The preciseness of calibration, both for load and temperature sensitivity, and steps taken to correct observed readings for temperature variations are limiting factors in the overall accuracy attained.

c. Deflection Gages

Most of the discussion of theory and error parameters that were previously discussed in regard to the soil pressure cells is also applicable to the WES deflection gages and their effect on soil behavior by being present. A major consideration is whether the gage movements are actually representative of the soil body at the point of measurement. The gage movements are considered to be representative of the soil mass if careful installation methods are used. Linear variable differential transformers (LVDT) were mounted within WES deflection gage housings. This particular type of deflection gage has not been used before; therefore, laboratory tests of soil-body movements with the gage installed and prior field performance were not available to determine an indication of accuracy. An indication of accuracy must be based on the LVDT specifications and laboratory calibration tests. Also, the field performance and factors in the field affecting the gage must be considered. The field performance will be discussed under consistency and reproducibility.

Due to the material of the gage housing and reference plate being of different modulus than the soil, stress concentrations and/or arching action probably occur in the vicinity of the gage. This concentration of stress around the gage should not have an appreciable effect on the load-induced soil-body movements, and the gage should register a fairly accurate indication of the body movements. Distortions in the soil body caused by the gage should be limited to a small area around the gage and should not affect movement a few feet or more below the gage, which is the movement that the gage is actually measuring (between the gage plate and the reference flange at a deep depth). As mentioned in the main text, lateral earth pressures acting on the gage housing with eccentric loads on the plate from small offsets are believed to affect the gage response, causing the measurement to be larger than the actual movement; therefore, loading position in the field was important. When the load was actually centered over the gage, the true response was believed

to be measured. This effect was noted mainly on the shallow-depth gages and decreased with depth of the gages. Thus from the above discussion, two factors in the field affecting the shallow-depth deflection gages appear to be lateral earth pressure coupled with large eccentric loads, both resulting from loads close to the gage position but not centered over the gage position. Loadings at 1-ft offsets or greater did not produce this effect. Other factors that could cause errors in the field are improper installation of the gage and assembly and changes of stability with time. Resistance changes in the gage wire with time, temperature effects, or variation of the elastic contents of the gage and assembly materials with time could result in error parameters.

Laboratory tests and calibrations of the LVDT element used in the deflection gage have yielded a resolution of 0.0002 in. with a digital voltmeter as the displacement monitor, a repeatability of ± 0.001 in., and an accuracy of ± 0.002 in. or better, considering the possible error parameters that could exist in the laboratory calibration tests including the associated equipment.

The optically monitored reference rod movements must also be considered under deflection gages. Accuracy of the optical system, utilizing a vernier-scaled height-measuring instrument and a self-leveling surveying level, theoretically is the accuracy of the vernier scale, which gave readings directly to 0.001 in. and estimated to 0.0001 in. This accuracy would occur only under perfect conditions, such as never moving the level once it was established and never moving the height instrument, only moving the vernier scale.

These perfect conditions did not exist in the field. The main factor greatly affecting the accuracy of the optical measuring system in the field was the inability to leave the surveying level and the height instrument in place. The effect of this error factor will be discussed under consistency and reproducibility.

d. Strain Gages

Microdot, Inc., embedment-type strain gages were used. Time limitations did not permit laboratory testing and calibration of these gages; therefore, the manufacturer's specifications must be used as an indication of their accuracy. These specifications are as follows:

Filament resistance	120 \pm 3.5 ohms
Tolerance of reported value	\pm 3%
Range of microstrain (linear within 1%)	\pm 6000
Temperature range	0-500 F
Maximum elongation without failure	2%

Accuracy would be about 1 to 2 percent.

Factors greatly affecting accuracy of these strain gages in the field are fragility, which will be discussed later, bending of the gages to the material being tested, degree of disturbance in the material behavior caused by the presence of the gage, matching of the gage modulus to the modulus of the material being tested, and temperature effects. To accurately indicate the strain in a material, the gage must be firmly bonded to or in the material, should have the same modulus as the test material, should be stable with temperature changes, should not disturb the natural behavior of the material, and should be fairly rugged. These factors apply specifically to mechanically operated strain gages.

e. Associated Equipment

Performance parameters or sources of error associated with the recording devices or other indicating means for the gages and cells should also be considered in their effect on accuracy. These associated equipment effects influence both the degree of accuracy and the consistency and reproducibility of instrument indications.

Small errors exist in the direct reading equipment (SR-4 strain indicators) and digital voltmeters from variations in the equipment and also from human ability in precisely reading the indicators. In the recording equipment, small errors enter from variation in the recorders and the associated signal amplifiers, which have the function of increasing the magnitude of the signal from an instrument circuit without distorting or warping the signal. For static measurements or very slowly changing indications, a direct meter reading indicator is usually used; but for fast-changing responses, meters are unsuitable due to their slow response. Therefore, some type of recording system with suitable response characteristics is necessary.

The primary performance parameters to be considered in all types of indicator and recording equipment are frequently response, relative phase shift of input components of different frequency, sensitivity, and stability. Such factors as variable sensitivity, shifting reference levels, temperature drift, and sensitivity to vibration or noise (disturbances which are carried along with the desired information) may cause problems. The degree of sensitivity, especially with respect to vibration or noise, decreases with increase of amplification required for the instrument response signal; therefore, the accuracy and consistency decrease with increase of amplification and consequently noise level.

2. CONSISTENCY

Consistency is difficult to separate from accuracy. Several factors that affect the accuracy of an instrument are also factors that determine the consistency of measurements from the instrument. No specific tests were conducted in order to determine the consistency of the instrumentation registrations; therefore, the indications of consistency to be discussed are taken from the actual test data. The results to be presented in the following paragraphs are the combinations of all the factors determining accuracy and governing field performance that add together to dictate the consistency of the behavior of the instruments under actual field use. Also (but probably not the least of these factors) added to the above are the error sources of the complete system of power supply, gage, amplifier, and indicator or recorder.

a. Soil Pressure Cells

In previous work with WES soil pressure cells (reference 6), which included a rigorous analysis of the data for cell performance, one of the findings showed that variability of individual readings expressed as a percentage of measured reading was as follows: 1.5 percent for 50 percent of all data and 5.6 percent for 99 percent of all data. An analysis of readings taken on different cells under identical loading conditions showed that the variability of the readings was as follows: 3.1 percent for 50 percent of all data and 11.9 percent for 99 percent of all data. Further analysis with theoretical comparisons led to the general conclusions that pressure cells used in that study were accurate to within 10 percent and that residual stress

measurements made regularly throughout a 9-month life of the test section were accurate to within 0.5 psi.

The results of the above previous rigorous analysis of the WES soil pressure cells corresponded to the cell behavior observed during the MWHGL tests. For all of the static loads, a study of cell indications at each depth from two and usually more loadings with each load point of each test configuration and load showed that the consistency of readings from the cells was within approximately 10 percent or less. This means that in the ranges of measured pressures, the variation of readings for identical test conditions was approximately ± 1 psi or less. Figure A6, which shows data for the 6-wheel 30,000-lb-per-wheel load tests in item 3, is a typical example of the behavior of the WES cells for all of the 30,000-lb-per-wheel load tests for both items 3 and 4. As can be seen, the average of the two groups of readings at each instrumented depth would be within ± 1 psi of either group. Figure A7 is typical of the single-wheel response; this curve is for the 30,000-lb single-wheel tests of item 3 and is typical of both items, where the duplicate determinations were within 0.5 psi of each other. Both figures A6 and A7 give responses of duplicate cells in addition to two or more readings from one cell for the 6-wheel tests; therefore, the ranges of the individual cell responses given above also apply to readings from duplicate cells, which means that the responses of the duplicate cells at each depth were within 1 psi or less. The cell histories in figures 63 and 64 in the main text of this volume show that the stability of the majority of the WES cells, over a long period of time (1-1/2 years), for the periods without testing was approximately ± 0.5 psi; about half of this variation is the accuracy possible in reading the SR-4 strain indicator.

As can be observed in figures A6 and A7, the consistency of the cells decreased with the number of wheels of the load assembly; in other words, the consistency of the single-wheel determinations was better than the 6-wheel data. However, the 6-wheel determinations were representative of the 12-wheel tests. Another conclusion, not illustrated, from the static load tests was that the consistency decreased with magnitude of load; the consistency of the 15,000-lb-per-wheel load tests was better than that of the 30,000-lb-per-wheel load tests.

For the SA-E soil pressure cells, the histories in figures 63 and 64

of the main text of this volume show that the output signals of the SA-E cells were very erratic, even at the time of installation. This indicated that the cells' output responses could not be expected to be very stable or dependable. The data from these cells under load tests were also erratic. Based on the SA-E cell output signal histories and their behavior under load, the decision was made that the data from these cells should not be used.

The degree of consistency for the dynamic load tests was the same as that given for the static tests. For the dynamic load tests, there were more cell readings to compare because there were results from both forward and reverse runs. These test results showed the cells behaved in the same manner as during the static load tests; that is, the consistency decreased with increase of load and number of wheels. Signal responses of the SA-E cells could not even be recorded for the dynamic load tests because the instability and noise level exceeded the actual pressure indication from the cells.

Position effects of load points during the dynamic loading tests did not appear to have an appreciable effect on the soil pressure cells and were not considered to be a source of inconsistency. If any effects were present, they were within the 10 percent range established for the static load tests. Another source of error that appeared to be negligible, but was thought to have been a source of some error, was the degree of accuracy to which the records for the dynamic load tests of the pressure cells could be read or measured. This also seemed to be within the 10 percent range of consistency previously discussed.

b. Pore Pressure Cells

The pore pressure cells are believed to have the accuracy stated previously of ± 0.5 percent. Careful installation of the cells was observed, and field conditions did not readily affect the cells.

c. Deflection Gages

The analysis of the consistency of readings from the WES soil deflection gages must be based wholly on the results of the MWHGL tests since no record of previous work with the gages exists and no tests were conducted for this purpose. As mentioned previously, these results portray the integrated effects of all factors that could affect the gages both in the gage system and under field conditions. For the deflection gage behavior, a distinction

must be made between items 3 and 4, whereas, the soil pressure cell results applied to both items. This distinction is made because the outside row of deflection gages in item 4 behaved differently from the inside row of deflection gages. In each item the inside and outside deflection gage rows were connected to separate power supplies. Due to each gage in item 4 on either the outside row or the inside row showing the same inconsistency, the conclusion must be drawn that something was wrong in that gage circuit or electrical arrangement. The cause of the trouble could not be determined. In addition, which gage row was in error could not be determined. This discrepancy was not noticed until the analysis of the data because the inconsistency did not manifest itself under the load tests of the single-wheel assembly, which was used to perform the preliminary tests. The discrepancy manifested itself and increased with increase in load and number of wheels. The discrepancy was a constant difference in readings between the gage rows at all gage depths.

A typical example of the deflection gage behavior as to consistency is shown in figure A8 for the single-wheel 30,000-lb load static tests in item 3. These curves are typical of the behavior under all test loads and wheel assemblies of both items; even item 4 showed the same relation, but data from the inside row differed by a constant amount from data from the outside row.

For item 3 the curves in figure A8 show that for the single-wheel 30,000-lb load, the consistency of readings from duplicate gages at each depth was within ± 0.001 in. of deflection. The consistency of readings for the 12-wheel 30,000-lb-per-wheel load tests was ± 0.001 in. for the same gage and ± 0.002 in. for duplicate gages. In item 3 consistency decreased slightly with increase of load and number of wheels, resulting in an overall degree of consistency of ± 0.001 in. or less for the same gage and ± 0.002 in. or less for duplicate gages. These values are within the range of values given previously for the accuracy of the deflection gages.

For item 4 the single-wheel 30,000-lb load tests showed no difference between the gage rows and yielded consistency of ± 0.001 in. for duplicate gages. The 12-wheel 30,000-lb-per-wheel load tests showed a consistency of ± 0.002 in. for each gage on both rows, but these static tests showed a difference of 0.025 in. of deflection between readings from the outside row and those from the inside row. This difference was a constant amount for all

duplicate gages at every depth; in other words, the inside row of gages yielded a curve that was shifted to the right and values at every depth were larger by 0.025 in. of deflection than the values from the outside gage row. In item 4 the consistency decreased with the increase of load and number of wheels, and the discrepancy between the gage rows increased with load and number of wheels. Due to the fact that items 3 and 4 have different stress and strain distributions in the soil because of the weak 2-CBR layer in item 4, it was impossible to determine which gage row in item 4 responded correctly.

For the dynamic load tests, the discrepancy again manifested itself in item 4 results of deflection by the same amount for the static load tests of the 6- and 12-wheel assemblies but was less than the static load test for the twin-tandem assembly. Due to both forward and reverse dynamic load runs being made, more data were collected for comparisons. These data showed that the degree of consistency decreased slightly under the dynamic load testing. This slight reduction is believed to be due to position effects, which were more critical for the deflection gages than for the soil pressure cells, and to the degree of closeness to which the movements could be measured on the oscillograph recordings.

In item 3 the degree of consistency varied from ± 0.001 in. for the same gage and duplicate gages under the single-wheel 30,000-lb tests to ± 0.002 in. for the same and duplicate gages under the 12-wheel 30,000-lb-per-wheel tests. As for the static load tests, this degree decreased slightly with increase of load and number of wheels.

For item 4 the degree of consistency was ± 0.002 in. for the same and duplicate gages under both the single-wheel and 12-wheel 30,000-lb-per-wheel tests, with the exception of the 0.025-in. deflection difference under the 12-wheel tests. The consistency decreased with the increase of load but not with the number of wheels.

At times the data from the reverse runs were slightly different from that of the forward runs of the dynamic load tests. This was not true for the soil pressure cell results and is believed to be due to the effect of load position being more critical for the deflection gages. The slight difference varied from zero to ± 0.005 in., depending on the position of the load points. This effect of position decreased with decrease of load and increase

of depth. With respect to position effects, the best run, whether forward or reverse, was the one used to obtain the data under a given loaded assembly, and the degrees of consistency discussed perviously apply to the results of the best run.

The long-time stability of the majority of the deflection gages can be seen in figures 67 and 68 in the main text of this volume. These are no-load or zero readings taken for 1-1/2 years. The stability of most gages was good before and after the testing periods; these periods were discussed under analysis of data in the main text.

d. Reference Rods

The degree of consistency of reference rod measurements of movements of the 12-ft-depth reference plane was low. This analysis had to be based wholly on the data from the MWHGL tests because no special tests for this purpose were conducted. Offset versus deflection curves were drawn for each load and assembly to be used as corrections for the deflection gages, as previously discussed. The development of and basis for these curves were discussed under analysis of data in the main text because the data from the reference rods did not dictate these curves even though the data fell around the curves.

For the single-wheel 30,000-lb load, the variability of the data from the curve used at the maximum deflections was 56 percent. The 6-wheel 30,000-lb-per-wheel load tests gave the best data; they had a variability from the curve used at the maximum deflections of 33 percent. For the 12-wheel 30,000-lb-per-wheel load tests, the variability at the maximum deflections was 53 percent. The twin-tandem 30,000-lb-per-wheel load tests yielded a variability at the maximum deflections of 37 percent. The above variations from the correction curves used represent the maximum variation of the data from the curves and are a measurement of the consistency of the reference rod movements.

Theoretically, the optically measured movements should have been as good as the accuracy of the vernier scale on the height-measuring rod, which was to the nearest 0.001 in. This accuracy and the degree of consistency were reduced greatly by the method that had to be used in making the measurements. The surveying level had to be turned from one item to the other upon the movement of the load cart from one item to the other for the static tests; however,

this would cause only a slight error, if any, because the surveying level and line-of-sight stayed fixed for the load tests in an item. Large errors and large inconsistencies in the measured data resulted from the fact that the height-measuring rod had to be moved each time a wheel or a low-hanging part of the load cart passed over or near the reference rod location. As an example, if a wheel of one of the assemblies was moving along static row 1, when the wheel came to the reference rod position, the height-measuring rod would be pulled and the wheel allowed to pass; then the rod would be put back. This procedure resulted in the large errors inherent in the optically measured reference rod movements. As can be deduced from the above procedure, these errors were mainly present at the maximum deflection points, which were the most important. Offset data did not have such large variability, and the offsets fell relatively close to the curves used. The curves used are believed to be within ± 0.005 in. of the actual deflections under load of the reference plane at the 12-ft depth. Figure A9 shows a reference rod measurement position.

e. Strain Gages

Consistency of the strain gages in the asphaltic concrete was not evaluated due to the high rate of gage loss (which will be discussed in the next section) and the instability of the working gages. As previously mentioned, due to the lack of time, no laboratory tests were conducted with the strain gages and no evaluation of the gages could be made from the field test data because of the high instability of the gages in working only part of the time. The gages that were not lost seemed to have reached their limits after the first static tests and, consequently, would break connection at times, then would register at other times.

3. LOSS OF INSTRUMENTATION

The loss of instrumentation during the static and dynamic load tests was negligible except for the pavement strain gages. During the instrumentation tests, the instruments that were lost completely or that had doubtful responses were as follows:

- a. One WES soil pressure cell (P1, 0.75-ft depth) in item 4 gave unreliable results throughout the testing period.

- b. The output signals of all three SA-E soil pressure cells were considered unreliable even though they registered response of a sort throughout the testing period; these cells were P8 (2.75-ft depth) in item 4, P8 (2.75-ft depth) in item 3, and P10 (0.75-ft depth) in item 3.
- c. One WES soil deflection gage (D3, 2.75-ft depth) in item 3 stopped working about halfway through the tests; gage D7 (2.75-ft depth) in item 3 was operating near its limits for about the last half of the tests (when a gage is operating near its limits, it loses some of its linearity and the readings may be in error by a slight amount); and gage D8 (2.75-ft depth) in item 4 began to show erratic behavior before tests started and was not considered reliable.
- d. Only two of the eight pavement strain gages operated throughout the test period, and they were of questionable behavior.
- e. One of the bottom temperature probes stopped working at the start of the tests.

Two WES soil pressure cells in item 4, P6 (0.75-ft depth) and P2 (7.5-ft depth), stopped working after all tests including traffic were completed. Cell P1 in item 4 gave unreliable responses but never stopped working. Cell P6 stopped working four days after the finish of the twin-tandem 240,000-lb static load tests, which were conducted after the completion of traffic tests in traffic lane 1. Cell P2 stopped working three months after cell P6 stopped. The causes of the unreliable behavior of cell P1 and the complete loss of cells P2 and P6 could not be determined. Cell P6, which was a shallow-depth cell (0.75-ft depth), may have been damaged during the 240,000-lb twin-tandem static load tests.

Two of the SA-E soil pressure cells, P8 (2.75-ft depth) in item 4 and P10 (0.75-ft depth) in item 3, stopped working completely during the traffic tests. The reasons could not be determined; however, the failure may have been a function of the large output signal instability exhibited by the SA-E cells, as shown in figures 63 and 64 in the main text. These histories of output signal instability of the cells were the basis for doubting the reliability of the SA-E cells during the instrumentation tests.

During the traffic tests, the surface deflection gage in each item

stopped working because the gages had reached their limits of movement. The surface gage in item 3 was replaced and was still working one year later, but the surface gage in item 4 could not be replaced due to the core rod being broken off at the top of the reference rod.

Deflection gage D8 in item 4, which began erratic behavior before the static and dynamic load tests were started, was at the 2.75-ft depth on top of the subgrade and is believed to have been damaged by water on top of the subgrade entering the gage housing. Gage D3 in item 3, also at the top of the subgrade, went out in the middle of the static and dynamic load tests and is believed to have possibly been damaged by water entering the gage housing. Gage D7 in item 3 was operating out of its linear range one year after the completion of testing, but it could be calibrated in the lower part of the nonlinear range before the calibration curve became asymptotic to the abscissa's axis.

As can be seen in figures 67 and 68 in the main text, the deflection gages in both items at the top of the subgrade experienced drastic movements during the construction of the test section. This large deflection occurred after the subbase became saturated, which resulted in free water standing on the subgrade, and was discussed in Volume III-A. The top of the subgrade is believed to have been softened by the water, consequently allowing the deflection gages to seat themselves in the subgrade; this is the reason for the gages to have operated near their limits of movement and possibly to have been lost. The seemingly erratic behavior of these gages during the testing period was discussed under analysis of data in the main text.

Originally 8 pavement strain gages were to be installed; however, a total of 10 gages were installed because two strain gages were replaced immediately after the first lift of asphaltic concrete was rolled, which occurred immediately after the first gages were installed. The gages were too fragile and the asphalt pavement roller mutilated them. This immediately made the condition of the eight working gages questionable. Three of the eight were lost during the paving and rolling of the top pavement lift. The remaining five gages had very erratic behavior under the first static load tests (12-wheel 180,000-lb load). Some of them would work, then stop, and start again later.

During the dynamic load tests with the 12-wheel 180,000-lb load, one of the five stopped working permanently. One more stopped during the 12-wheel 360,000-lb static load tests, and another one stopped during the dynamic load tests. This left two working very erratically for the remaining tests. One of the two stopped immediately after the finish of the static and dynamic load testing and before traffic started. One gage was still working occasionally one year after the completion of testing. The strain gages installed in the MWHGL test section pavement failed for two reasons: they were not sufficiently rugged to withstand the construction processes and did not have a large enough range for the strains induced by the large loads.

One bottom temperature probe failed before tests started on the test section, and the other bottom probe failed during traffic. Both bottom probes were replaced at the same time as the surface deflection gage in item 3. The temperature probes failed for undetermined reasons.

A summary of the instrumentation channel losses, which were considered satisfactory overall, is listed in table A-23.

Table A-23
Instrumentation Losses

<u>Type of Instrumentation</u>	<u>Total Installed</u>	<u>No. Lost</u>
WES soil pressure cells	17	2
SA-E soil pressure cells	3	2
Deflection gages	18	3
Pore pressure cells	2	0
Temperature probes	4	0*
Pavement strain gages	8**	8

* Two failed and were replaced so no data were lost.

** One registered intermittently.

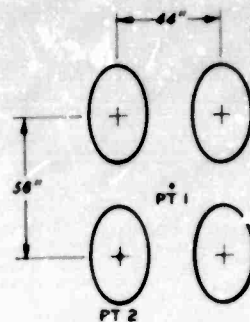
A high percentage of soil instrumentation, cells and gages, is considered to have been performing accurately during the instrumentation testing program and a high percentage was still active one year after the completion of testing; however, some instruments are questionable as to their reliability due to possible damage under traffic tests.

1. SUMMARY

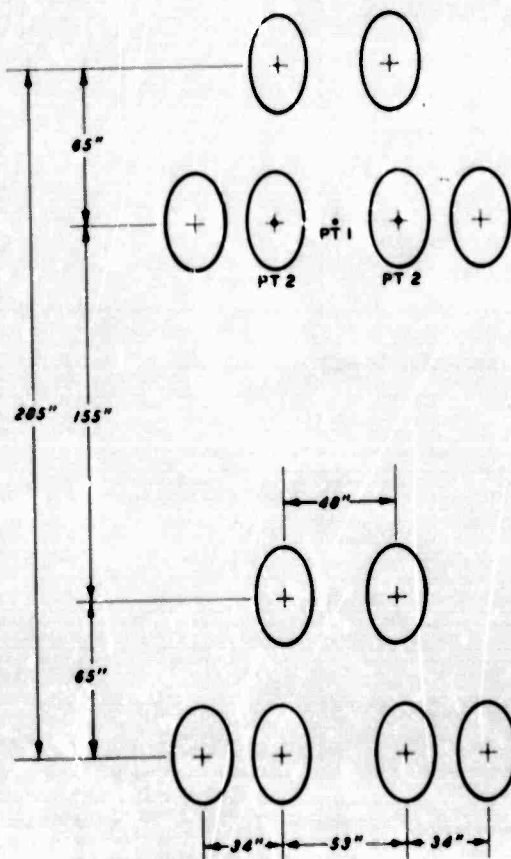
Future similar installations could profitably use the WES soil pressure cells, pore pressure cells, and deflection gages. The type temperature probe used was satisfactory. A method(s) better than the optical technique used in this work is needed to determine surface and reference plane deflections.



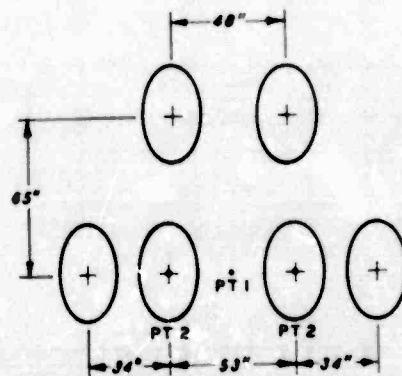
SINGLE WHEEL



TWIN TANDEM
ONE TWIN-TANDEM
COMPONENT OF
747 ASSEMBLY



TWELVE WHEEL
ONE MAIN GEAR OF C-5A



SIX WHEEL

Figure A1. Locations of Assembly Loading Points of Wheel Assembly
Used in Flexible Pavement Tests

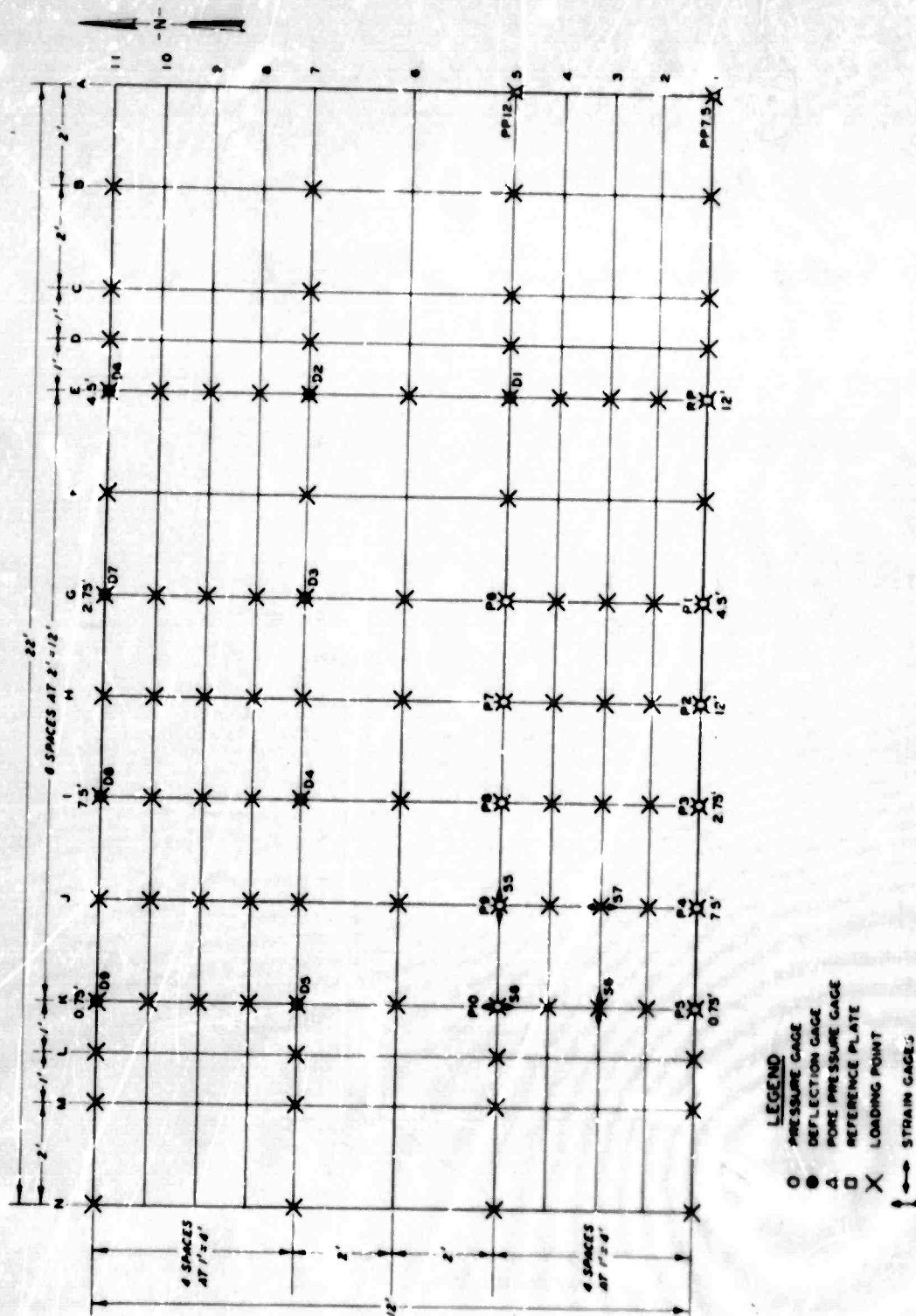


Figure A2. Static Loading Grid System, Item 3, Flexible Pavement Test Section

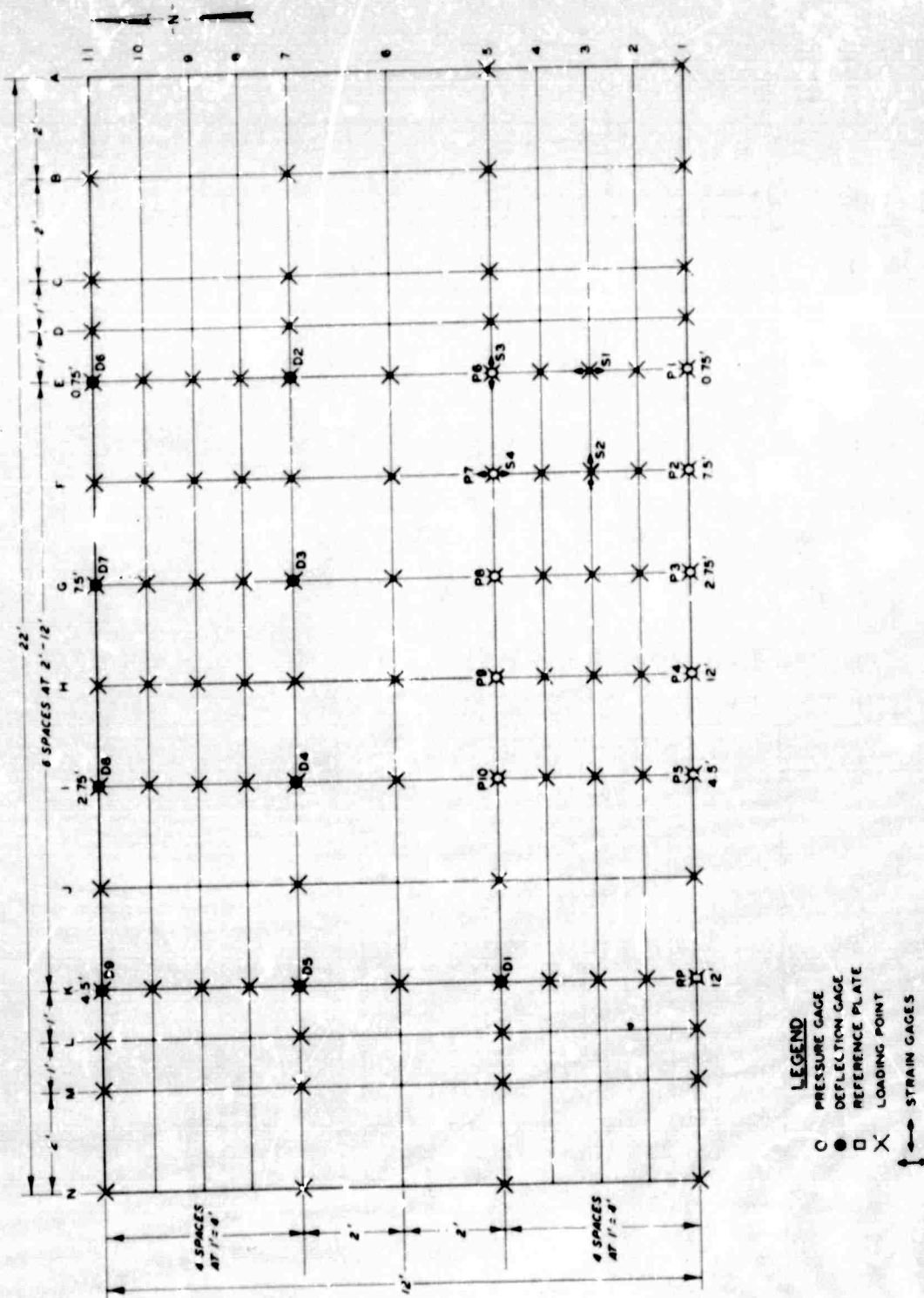
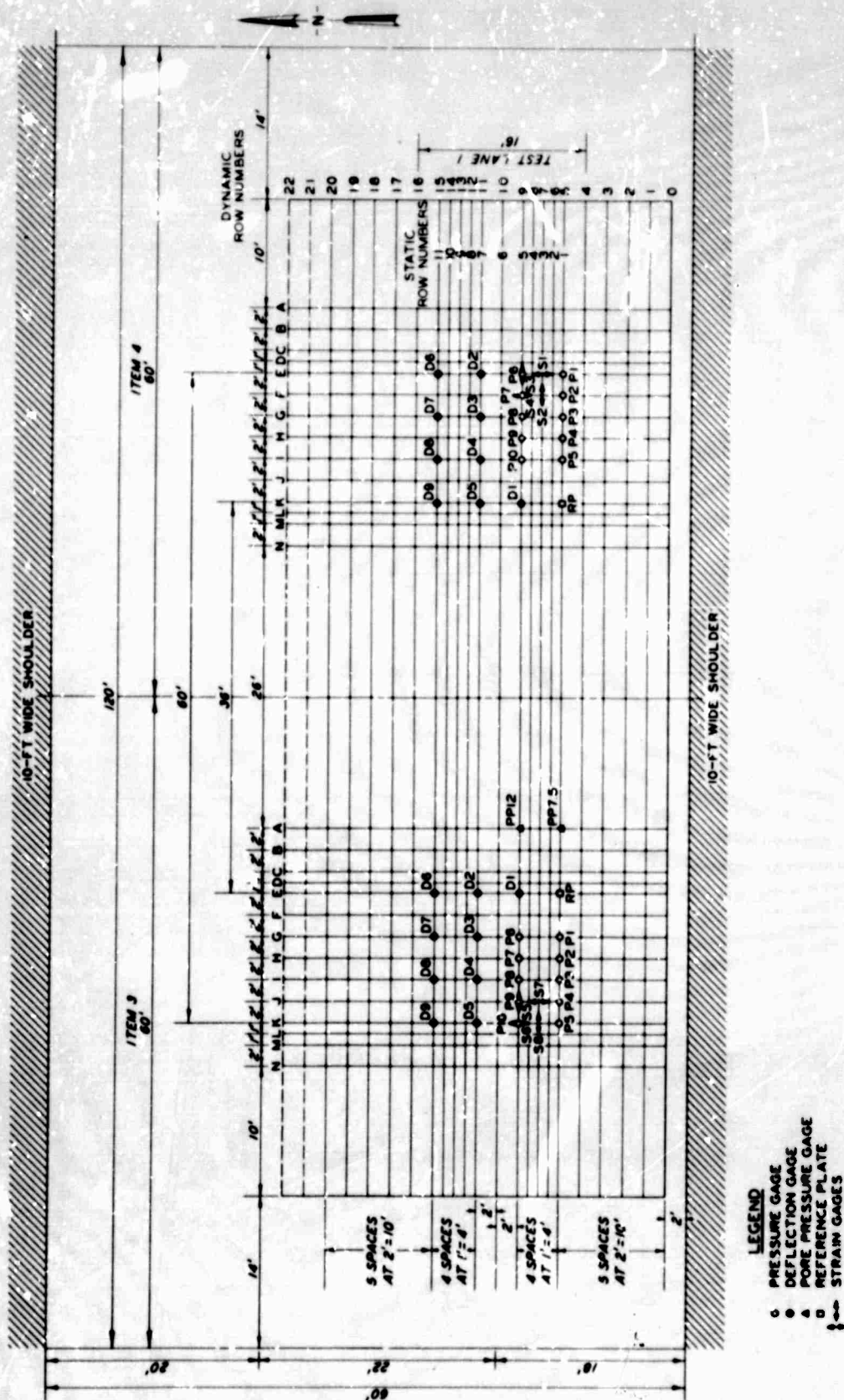
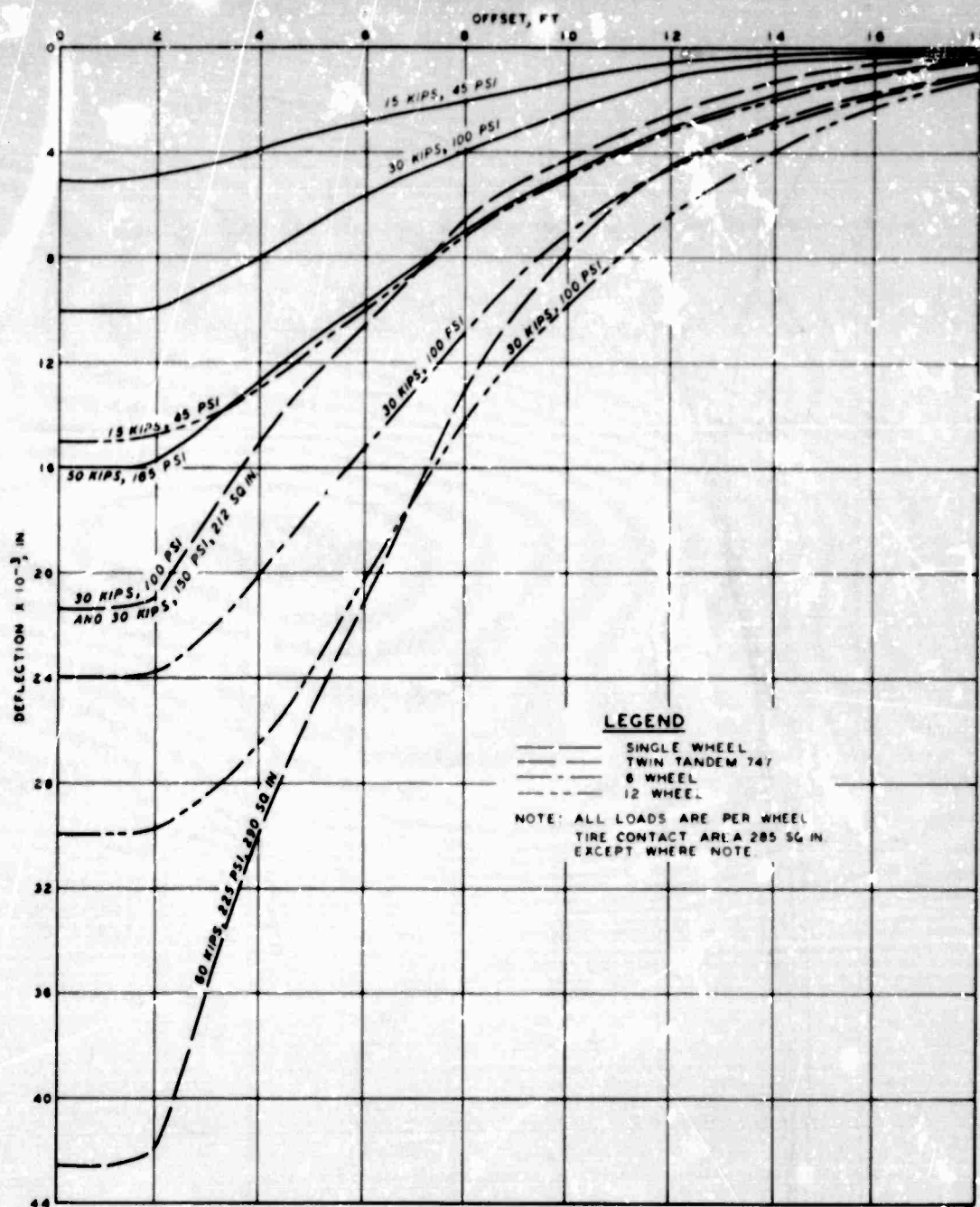


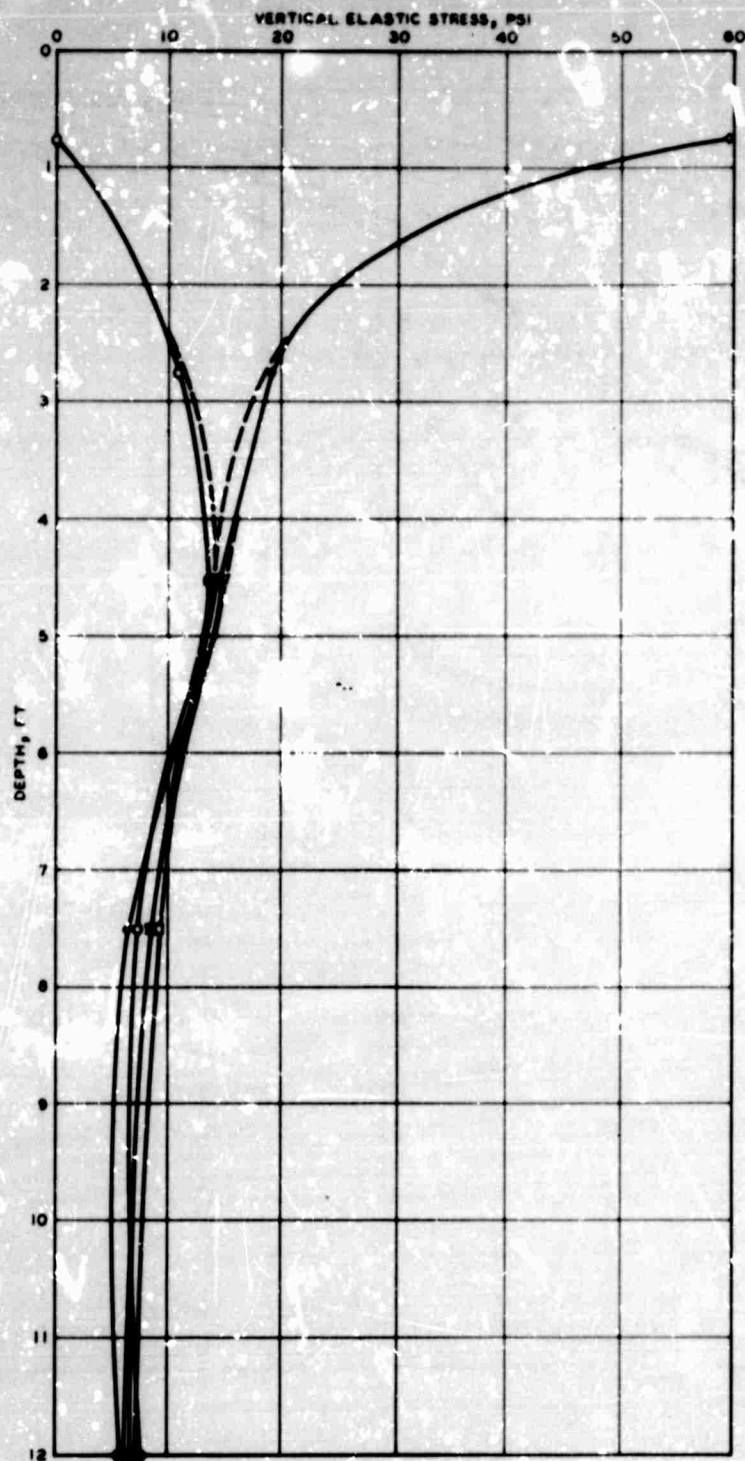
Figure A3. Static Loading Grid System, Item 4, Flexible Pavement Test Section





**OFFSET VS DEFLECTION
AT 12-FT DEPTH
ALL LOADS ARE PER WHEEL
FLEXIBLE PAVEMENT TESTS**

Figure A5. Correction to be Applied for Induced Movements Under Load



LEGEND

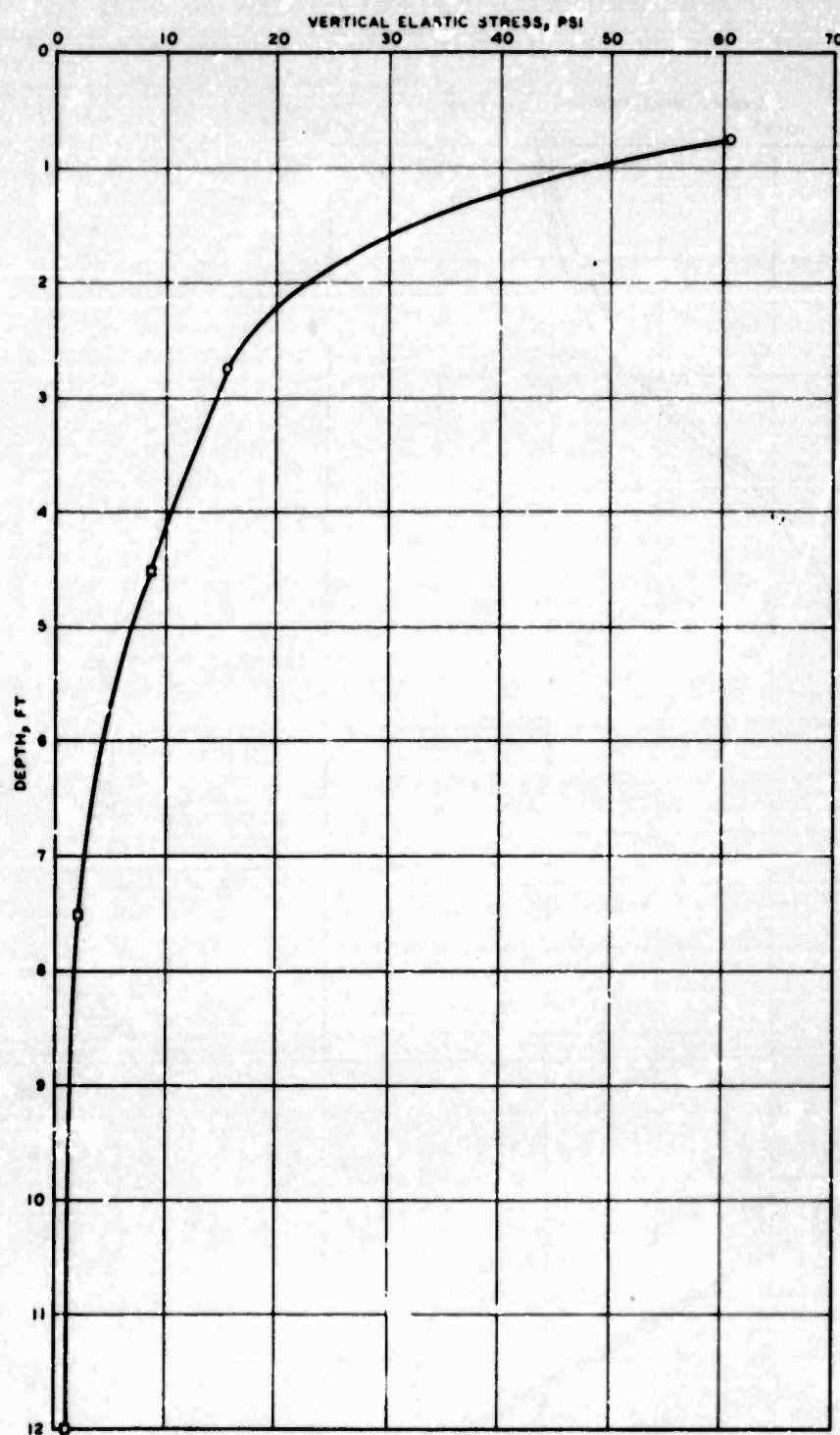
LOAD POINT:

- ROW 1, P1 THRU P8
- ROW 5, P8 THRU P10

LOAD POINT 2

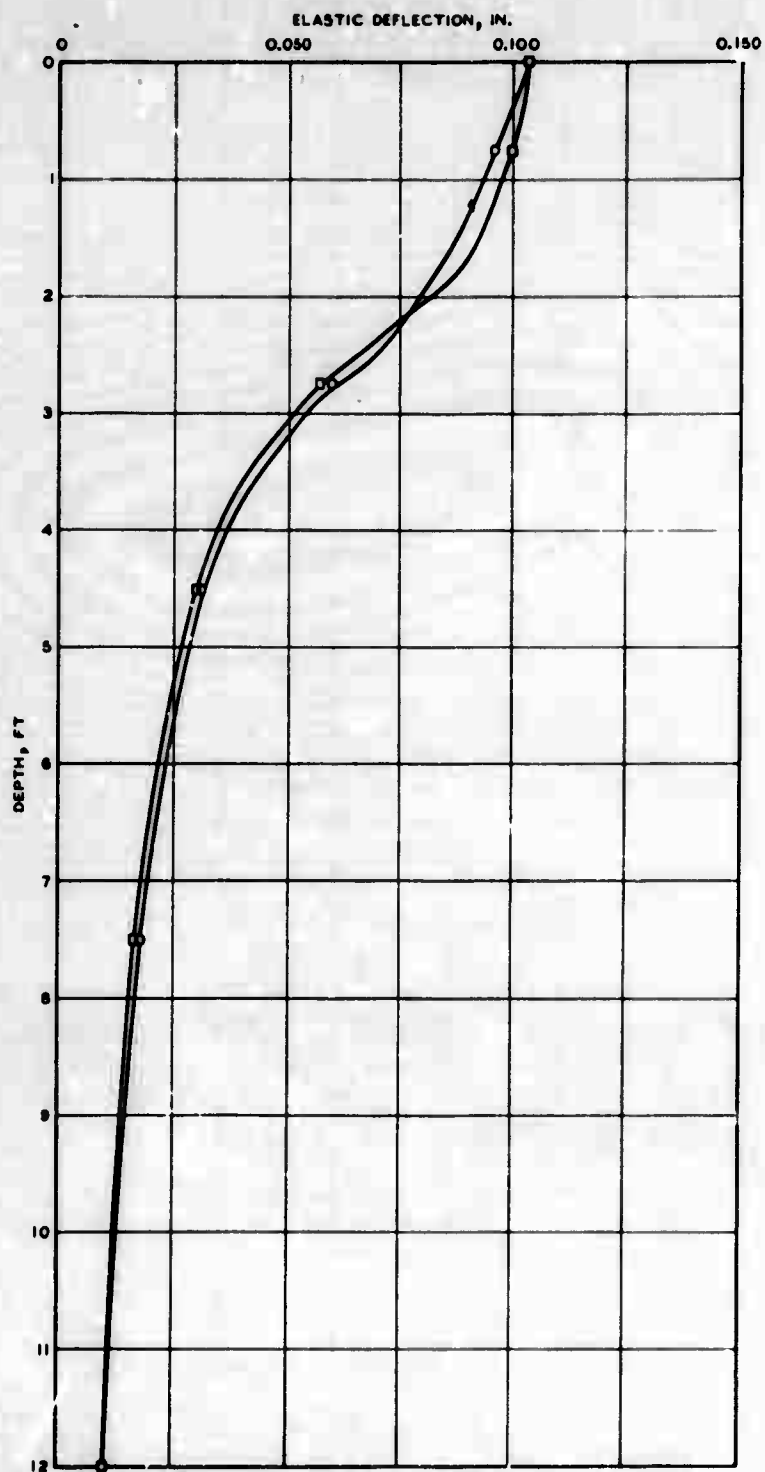
- ROW 1, P1 THRU P8
- ▲ ROW 5, P8 THRU P10 (P11 AT ROW 3)
- ▼ ROW 5, P8 THRU P10 (P11 AT ROW 6)

Figure A6. Depth Versus Vertical Elastic Stress, Six-Wheel, 180-kip Static Loading, Item 3, Flexible Pavement (Initial Data)



LEGEND
 O ROW 1, P1 THRU P5
 □ ROW 3, P8 THRU P10

Figure A7. Depth Versus Vertical Elastic Stress, Single-Wheel, 30-kip Static Loading, Item 3, Flexible Pavement Tests (Initial Data)



LEGEND
 O ROW 7, D2 THRU D5
 □ ROW 11, D6 THRU D8

Figure A8. Depth Versus Vertical Stress,
 Single-Wheel, 30-kip Static Load,
 Item 3, Flexible Pavement Tests
 (Initial Data)

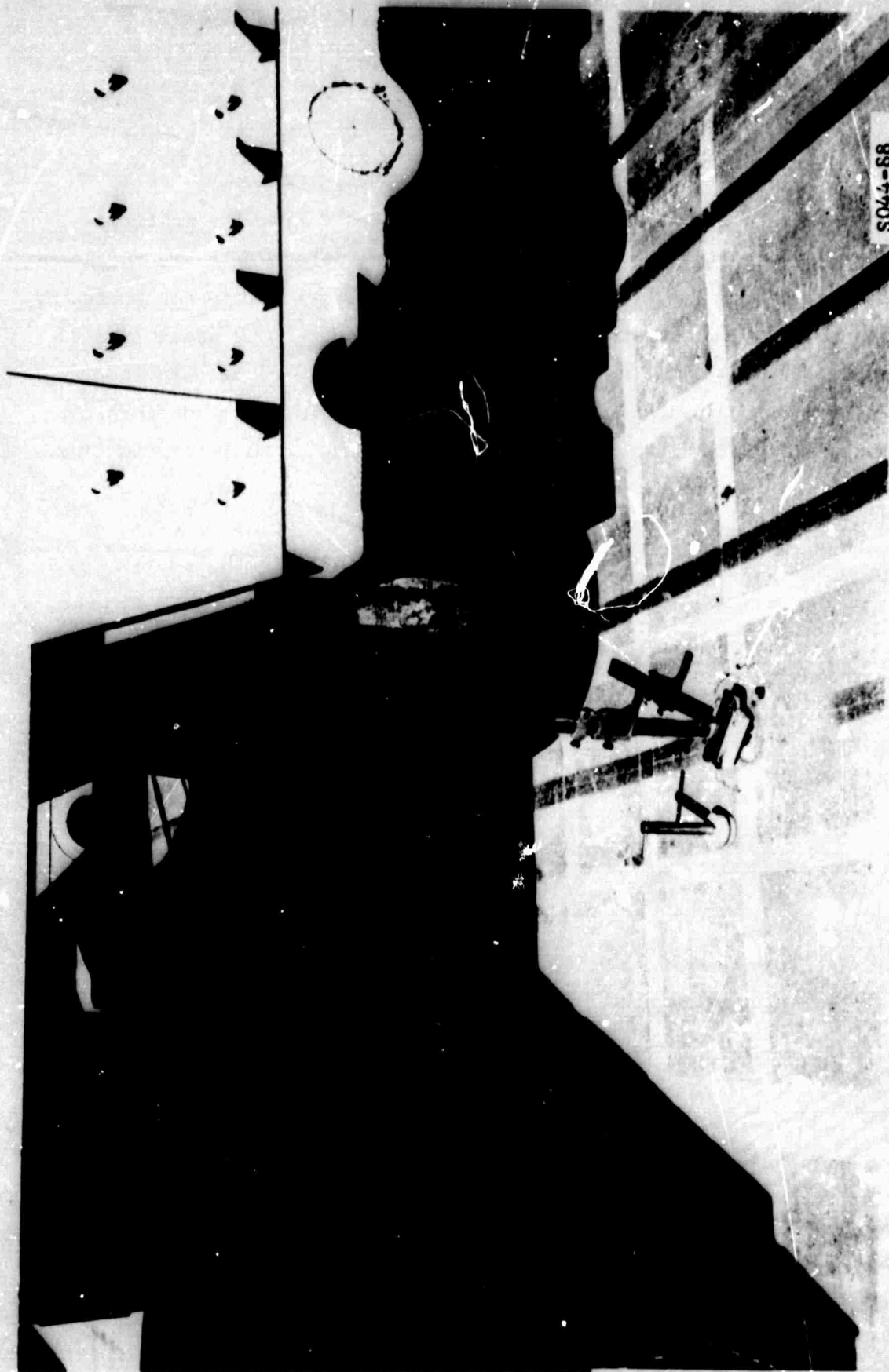


Figure A9. Load Cart in Position for Reference Rod Measurement

NOT REPRODUCIBLE

APPENDIX B: RIGID PAVEMENT INSTRUMENTATION MEASUREMENTS

SECTION I

INTRODUCTION

This appendix is a listing of the data collected during the multiple-wheel heavy gear load (MWHGL) rigid pavement tests. These data are complementary to the information presented in the basic report. Data are presented for load tests for single, twin-tandem, 12-wheel, and 6-wheel assembly loadings, from 15,000 to 41,500 lb per wheel. Loadings were either static or dynamic (slowly moving) loads. Data consist of measurements of deflection, strain, pressure, crack width, and deflection response to vibratory loading.

SECTION II

DATA REDUCTION AND PRESENTATION

Data were recorded on 14-channel magnetic tape, and an arrangement was provided for a paralld recording on an oscillograph recorder. The data were reduced from the oscillograph traces manually. All calibration factors were predetermined for the transducers by the manufacturers and checked by Government personnel during the acceptance tests. All gain settings, calibrations, and sensitivity factors were incorporated manually in the data-reduction process. Data were tabulated to the nearest 0.001 in. for deflection readings, to the nearest microinch per inch for strain, and to the nearest 0.1 psi for pressure readings. Data were rounded to these accuracies based on manufacturer's specified accuracies and on past experience with similar instrumentation readings. An explanation of the gage identification system is shown in table B1.

1. STATIC AND DYNAMIC LOAD TESTS

a. Single-Wheel Assembly

Static loading tests were conducted at various positions along the test section. A total of 16 different positions were loaded with a single-wheel load of 15,000 lb. The test positions are shown in figure B1. The same load positions were tested under a single-wheel load of 22,500 lb except for positions 15 and 16. The 22,500-lb wheel load was not placed on item 4 to avoid any possibility of premature cracking.

Data collected during static testing with the single-wheel load are summarized in table B2. The data represent the change in either deflection, strain, or pressure from the unloaded to the loaded condition. The loads applied were relatively small and are considered to be in the elastic range of the structure. Two columns of figures present the data obtained under single-wheel loads of 15,000 and 22,500 lb with the exception of test positions 15 and 16. In instances where a dash line is shown, the noise level was too high to determine a reasonable reading. An arbitrary criterion was established for noise levels. When the signal-to-noise ratio was less than 10:1, the reading was discarded. Where a blank is shown, either the transducer did not register or the indicated load was not tested at that point.

Dynamic single-wheel loadings were applied to the test section after completion of the static tests. The wheel positions in the various traffic lanes are shown in figure B2. These tests were conducted with the load cart traveling at about 3 mph. Data collected from the single-wheel dynamic load tests are shown in table B3 for the 15,000-lb load and in table B4 for the 22,500-lb load. The load was applied down a particular lane in the west direction and then the load cart was backed down the same lane in the east direction. Data for test item 4 are presented in table B3 only, as the 22,500-lb load was not applied to test item 4. The values tabulated are the peak values obtained as the load was traversing the traffic lane.

b. Twin-Tandem Assembly

Static loading tests were conducted with a twin-tandem assembly loaded to 15,000 and 22,500 lb per wheel. Test positions were determined from the position number and location. The position number indicates the wheel position relative to a gage. The location refers to a particular gage and indicates the general vicinity of the load. Sometimes the same relative wheel position holds for several different types of gages; thus, the need to include a location designation is apparent. The various test positions are shown in figures B3-B5. The data are presented in table B5. The 22,500-lb load was not applied to test item 4 as there was some chance of cracking the pavement.

Twin-tandem dynamic loadings were applied to the test pavements with loads of 15,000 and 22,500 lb per wheel. The traffic lines where the dynamic loads were applied are shown in figure B6. These tests were conducted with the load cart moving at about 3 mph. Data collected from the slowly moving twin-tandem assembly tests are shown in table B6 for the 15,000-lb-per-wheel load and in table B7 for the 22,500-lb-per-wheel load. The load was applied along a particular traffic line in the west direction with the load cart facing west, and then the cart was backed down the same traffic line in the east direction with the load cart still facing west. Data for test item 4 are presented in table B6 only, as the 22,500-lb-per-wheel load was not applied to test item 4. The values in tables B6 and B7 represent the peak values obtained as the load cart was traversing the traffic lane.

c. 12-Wheel Assembly

Static loading tests were conducted with the 12-wheel assembly loaded to 15,000 and 22,500 lb per wheel. As with the twin-tandem static load tests, the load location was determined from a position number and a location. The position number defines the position of the wheels relative to a gage and the location designates the general vicinity of the load and the gage of primary interest. The wheel positions for the various position numbers are presented in figures B7-B10. The data are presented in table B8. As before, the load of 22,500 lb per wheel was not applied to test item 4 to avoid cracking the pavement.

Twelve-wheel-assembly dynamic loadings were applied to the test pavement along the traffic lines shown in figure B11. Data collected from the 12-wheel-assembly dynamic load tests are shown in table B9 for the 15,000-lb-per-wheel load and in table B10 for the 22,500-lb-per-wheel load. The load was applied along a particular traffic line in the west direction with the load cart facing west. Data for test item 4 are shown only in table B9 as the 22,500-lb-per-wheel load was not applied to test item 4. The tabulated values are the peak values obtained as the load cart was traversing the traffic line. The locations of these lines were discussed and presented in Volume III-A.

d. 6-Wheel Assembly

A limited amount of static load testing was conducted using one 6-wheel bogie of the 12-wheel assembly. The test vehicle was constructed such that each 6-wheel bogie of the 12-wheel assembly was an independent load cart and could be moved separately. Static load testing was conducted with a 22,500-lb-per-wheel load at various positions on test items 1, 2, and 3. The test positions used were identical to those used for the 12-wheel assembly where possible. The fact that no trailing 6-wheel bogie was present made it impossible to use some of the 12-wheel-assembly test positions. The test positions correspond to those presented in Volume III-A for the 12-wheel assembly. Data collected are presented in table B11.

Dynamic load tests were conducted with the 6-wheel assembly loaded to 22,500-lb-per-wheel and are summarized in table B12. The loads were applied in the same manner as previously discussed, i.e., along one traffic line in the west direction and then along the same line in the east direction

with the load cart always facing west. The values tabulated represent peak values only.

2. SUPPLEMENTAL TESTS

After reviewing the results of the static and dynamic load tests, supplemental tests appeared desirable to further define the shape of the deflected slab under various gear assemblies. These tests consisted of strain measurements and optical deflection measurements on test item 2.

a. Strain Measurements

An array of 10 strain gages was mounted on the top surface on item 2. This array consisted of two arms of five strain gages each at right angles to each other. The arms were oriented in the north and east directions and spaced 30 in. apart except for the last strain gage on the east arm, which was 37 in. from the nearest gage. The intersection of the arms was in the center of the southwest panel of test item 2. A sketch of the gage layout is shown in figure B12.

Two separate tests were conducted using the supplemental strain gages. The first consisted of moving the 30,000-lb single-wheel load cart along the east arm of the strain gage layout. The load cart was started on the east edge of the pavement and moved toward the center of the slab in 25-in. increments. The strain gages were read at each 25-in. increment until the load reached the center of the slab. The results of this test are presented in table B13. The second test was conducted with the twin-tandem load cart and was intended to provide information on the short-term stability of strain measurements. The twin-tandem assembly was loaded to 15,000 lb per wheel and positioned such that the tandem dimension was in the eastern direction and the twin dimension was in the northern direction. The center of gravity of the twin-tandem assembly was positioned over the center of the southwest panel and strain readings were taken immediately after the load was positioned. Strain readings were taken again after the load had been in position for 15 minutes. The results of this test are shown in table B14.

b. Optical Deflection Measurements

Optical measurements of slab deflections were attempted on a grid system established on test item 2. Small reference plugs were attached to

the slab surface using an epoxy resin adhesive. The rod consisted of a steel rule with a target sight and vernier attachment that allowed readings to be made by the rodman to the nearest 0.001 of an inch. Two level stations were established on either side of the test track by casting small concrete pedestals to hold the level at a convenient elevation. The results of the optical tests were somewhat inconclusive due to the inability to measure the small deformations that occurred over the relatively large distances. The instrument man followed a policy of sighting the target along the edge of the cross hair, but the deformations a short distance away from the load were so small that it was not possible to achieve reliable repeatability of readings. Averaging several sets of level readings and estimating the radius of curvature by passing a circular arc through three points indicated that a crack may have formed in the southwest slab of item 2, but the validity of the conclusion is questionable due to the unreliable nature of the data.

3. TRAFFIC TESTS

a. 12-Wheel Assembly

After completion of instrumentation testing, 12-wheel-assembly traffic was applied to the test section. This assembly represents one main gear of a C-5A aircraft. The traffic patterns for application of this accelerated traffic are shown in figure B13. Traffic was applied in a sequence that would produce a favorable transverse distribution of traffic on the pavement - lines 1, 2, 3, 4, 5, 5, 4, 3, 3, 2, and 1. Traffic was applied with the load cart traveling forward on each traffic line, then traveling backward along the same line with the load cart always facing west. Thus, one traffic pattern consisted of 22 passes of the 12-wheel load cart.

A large number of transducers had failed before the start of 12-wheel traffic, and additional strain gages were mounted on the top slab surface to replace some of the gages that had failed. A layout of the instrumentation that was used during the 12-wheel traffic testing is shown in figure B14. Transducer output was recorded on magnetic tape on a continuous basis, and copies on chart paper were produced during the tests at specific intervals for monitoring purposes. Peak values manually selected from the charts are presented in table B15. The peak deflection values presented in the table are all recoverable deflections. Permanent deformations were also calculated

from the residual voltage output of the differential transformers. The permanent deformations are shown graphically in figures B15-B22. These readings were taken periodically during the 12-wheel-assembly traffic testing period.

In addition to the electrical instrumentation readings, crack width was monitored using a Whittemore gage. Crack width was measured at several locations as shown in figure B23. The results of the measurements are shown graphically in figures B24-B28.

Dynalect measurements were made on each test item at the end of each working day. The Dynalect is a nondestructive testing device that is mounted in a trailer. The Dynalect induces a sinusoidal load of 1000 lb peak-to-peak to the pavement with two opposing eccentric fly wheels. The load is applied to the pavement at a frequency of 8 Hz through two steel wheels. Pavement deflection is sensed by an arm of five geophones extended perpendicular to the axle between the steel loading wheels. One geophone is positioned directly below the axle between the steel loading wheels and the other geophones are spaced at 12-in. intervals along the arm. Representative data for three test positions in all items and both lanes are presented in tabular form in table B16. The representative test positions are shown in figure B29.

b. Twin-Tandem Assembly

The 12-wheel-assembly traffic testing was conducted on the south lane of the test section and, therefore, did very little damage to the north lane. Following completion of the 12-wheel-assembly traffic testing, traffic was applied to the north lane using a twin-tandem gear with the same geometry as one assembly of the Boeing 747 aircraft. This assembly was loaded to 41,500 lb per wheel, and traffic was applied to the center portion of the north lane. The dimensions of the twin-tandem assembly were such that the maximum concrete stresses generated with the wheels tangent or perpendicular to a joint is nearly the same for the range of radii or relative stiffness of the four test items. The location of the traffic pattern was, therefore, not critical. Trafficking only the center of the lane avoided any areas of edge effects that might have been introduced by the 12-wheel traffic applied to the south lane along the longitudinal joint.

The north lane was instrumented with top surface strain gages on

items 2 and 3 as shown in figure B30. Traffic was applied on five traffic lines similar to the 12-wheel traffic. The traffic patterns are shown in figure B31. Traffic was applied with the load cart traveling forward on each traffic line and then traveling backward along the same line with the load cart always facing west. The trafficking sequence by line number was as follows: 1, 2, 3, 4, 5, 4, 3, 2, 2, 3, 4, 4, 3, 3, 2. The full sequence is referred to as a traffic pattern and consists of 30 passes of the twin-tandem load cart.

A total of 68 traffic patterns were applied to the north lane with the twin-tandem gear. Periodically charts of the transducer outputs were produced on the site and peak values were manually reduced from these charts. The peak values thus obtained are listed in table B17.

SECTION III

EVALUATION OF MEASURING INSTRUMENTS

1. CONSISTENCY OF MEASUREMENTS

The ability of a transducer to produce consistent, repeatable readings is a function of many factors including (a) environment, (b) type of measurement (static, dynamic, etc.), and (c) inherent transducers accuracy - to name only a few. Other sources of error are introduced as the complexity of a system increases. All conditioning, recording, and playback equipment are subject to fluctuations in voltage, amperage, etc. Human error is also reflected in test data and is often difficult to detect when the absolute values of the data are small. The manual reduction of data involved arithmetic operations on vast quantities of numbers and is a likely point for human error. The discussions in the following paragraphs are all subjective in nature as they were drawn from test data that were not specifically collected to determine consistency of data.

a. Soil Pressure Cells

Soil pressure cells used in the rigid pavement test section (see locations in figure B32) were a type of commercially manufactured transducers that had not been previously used by CERL for measurements in a pavement structure. A preliminary test was performed prior to installation that indicated the cell tested was over-registering about 1/2 psi over the entire range. This test was preliminary and some boundary condition effects were undoubtedly introduced, but the test seemed to indicate reasonable results could be expected for measuring pressure in clay soils. The cells were embedded in the pavement structure for several months prior to loading. The cells were erratic from the start of static testing through the completion of the traffic testing.

The erratic behavior made it impossible to conclude how consistent the readings were, and no statement can be formulated in regard to the effects of changes of gear assembly or wheel loads. The poor results obtained during the static and dynamic load tests with all gear configurations and during the initial portion of the 12-wheel-assembly traffic tests led the field crew to the conclusion that all pressure cells had failed and they were not monitored during the bulk of the 12-wheel-assembly traffic tests.

b. Deflection Gages

The basic principle behind the measurement of deflection by linear variable differential transformers (LVDT) has been successfully employed for some 20-25 years. The original LVDT gages required external electronics to supply the carrier. The advent of integrated circuits has made it possible to encapsulate the electronic equipment for the carrier signal in the transformer housing, thus reducing the noise on long cable runs. Integrated-circuit type LVDT's were used in the rigid pavement test section.

The test data indicated a consistency of ± 0.001 in. could be expected. The laboratory accuracy of an LVDT gage is about 0.001 in., but the problems associated with field testing (temperature changes, slab warping, etc.) reduce the consistency of readings to about ± 0.001 in.

c. Strain Gages

Strain gages were the transducers most sensitive to environmental effects and load positioning of all those that were used on the test section. Contraction and expansion of the concrete slabs due to temperature changes were reflected in the strain data. No meaningful consistent measurements could be extracted from the strain data other than that collected during the trafficking period with the 12-wheel and twin-tandem assemblies. The consistency of strain readings for these tests was judged to be between ± 1 and ± 5 μ in./in. The manner in which the data were recorded and reduced eliminated the environmental effects and reflected only load strains.

A problem arises in the measurement of strain on a rigid pavement when cracking occurs. The strains will tend to gradually grow larger under repeated applications of load until a crack occurs, at which time, the strain is generally relieved and drops to some lesser reading and gradually grows larger again. This process continues until the cracking either destroys the gage or the pavement is cracked into pieces so small that each segment of pavement acts as an individual block and is too small to act as a flexural member. When cracking occurs, reproducibility of strain measurements is impossible to achieve.

d. Optical Deflection Measurements

The optical measurements of pavement deflection made during the

supplemental tests on test item 2 showed poor reproducibility. During these tests, attempts were made to measure transient deflections, which are very small in rigid pavements. Even though level monuments were constructed as close as possible to the test section to minimize the length of shots, the ratio of sight distance to measured deflection was very large and contributed greatly to the inability to repeat readings. These data were not presented due to the poor reproducibility that made the value of the readings questionable.

The optical measurements of permanent pavement deflection made during the traffic testing phase of the study appeared to be quite consistent. The permanent deflections were rather large, compared to transient deflections, and were reproducible to about 0.01 ft. The difference in the reproducibility of the level readings for transient and permanent deflections was due to the differences in the amount of movement associated with each type of deflection.

2. LOSS OF INSTRUMENTATION

An abnormally high number of gage failures were experienced during the life of the rigid test pavement. These failures can be classed in three different categories as follows: (a) failure of electronic components, (b) failure due to improper installation and/or environmental effects, and (c) failure due to mechanical damage. Each type of gage failed at some time during the test program. A description of the type of failure encountered with each type of gage is presented in the subsequent paragraphs.

a. Deflection Gages

Apparently the deflection gages failed primarily through two causes: failure in the integrated circuits within the transformer housing and failure due to pavement cracks forming in the immediate vicinity of the gages, which affected the bond between the concrete and the gage or parted the lead wires. Failure due to cracks in the pavement could hardly be classed as an instrumentation failure; however, this is pointed out as a guide for future installation. It is a consideration that should not be ignored.

b. Embedded Strain Gages

Posttraffic examination of the condition of the embedment strain gages revealed an as-yet unexplained phenomenon. Details of the gage installation

techniques were described in the main body of this report. The gages were positioned at the extreme lower slab surface such that the lower face of the foil envelope protecting the strain gage often was exposed to the subgrade soil. Posttraffic examination of these gages showed many to be corroded completely away or corroded to such a point that the gage was inoperable. Chemical analysis provided no evidence of chemical decomposition. Two possible causes were postulated: some material in the soil reacted with either the foil envelope or the water to form a corrosive environment that escaped the chemical analysis; or, a more likely possibility, an electrolytic cell was created by the combination of water, oxygen, and currents produced by the dissimilar metals of the gages. None of the gages showed an appreciable loss of bond even though some had been partially corroded away. Use of an installation technique such as bonding to embedded concrete beams might have avoided some of the strain gage failures.

b. Top Surface Strain Gages

Failures in the top surface strain gages were mainly due to infiltration of moisture through the waterproofing compound and to mechanical damage such as accidentally hitting one of the gages with a load wheel. Failure of these gages presented no real problems, however, as they were readily accessible for repair.

c. Pressure Cells

Only one pressure cell was recovered during the posttraffic tests. Examination of this cell revealed that the strain gage sensing elements had lost bond with the active diaphragm, rendering the cell useless. Examination of one cell cannot be considered conclusive; however, all pressure cells produced signals similar to that generated by the one cell that was retrieved in the posttraffic tests.

3. SUMMARY

Based on observations and experience during the tests of the rigid portion of the MWHGL test section, the following comments are made for guidance in future design and installation of instrumentation to determine the reaction of rigid pavements to static and slowly moving loads and to traffic.

a. Redundancy

When the transducers are not accessible for repair and replacement in the event of mechanical malfunction, redundancy on the order of 100 percent is desirable if a test is to last for an extended period of time. Accessibility to the transducer and supporting electronic equipment should be maintained insofar as possible. In general, transducers are located at critical points in the pavement structures. Failures are most likely to occur at these critical points and the loss of transducers at these points should be anticipated.

b. Deflection Measurements

The most accurate means of measuring rigid pavement deflections is by electronic devices such as the LVDT's. The recoverable deformations in rigid pavements are very small and are extremely difficult to detect by means other than electronic devices. Accessibility to the transducer and supporting electronic equipment is essential. In providing accessibility, however, care must be taken not to induce stress concentrations that might adversely affect pavement performance.

c. Strain Measurements

Gage installation techniques should be of primary concern for embedded strain gages. A promising technique seems to be casting the strain gages in a concrete beam under laboratory conditions and then casting the beam in the pavement during the construction phase. This technique would allow testing the beam in flexure prior to installation in the pavement, and the amount of concrete cover over the gage could be closely controlled. Extreme care should be exercised to ensure that the concrete beam would have the same properties as the test pavement. Shape and texture of the beam should also be carefully selected to ensure adequate bond with the pavement concrete. Surface strain gages appear to offer no particular problems. Care should be taken to provide moisture protection during installation. Mechanical damage at times is unavoidable and some amount of damage should be anticipated.

d. Pressure Measurements

Pressures in soil are difficult to measure due to a variety of reasons. Soil arching, mismatched moduli of soil and gage, and presence of moisture are only a few of the complications that affect soil pressure measurements. Apparently more data are required to successfully instrument a

rigid pavement structure to measure soil pressures. These pressures are relatively small and the soil environment is somewhat hostile for electrical transducers. A test program is recommended to advance the state-of-the-art in pressure measurements under rigid pavements. Until pressure measurement techniques for soil under rigid pavement are improved, it is recommended that pressure measurements either not be attempted or else held to a very nominal amount.

TABLE B1

IDENTIFICATION OF RIGID PAVEMENT INSTRUMENTATIONa. DEFLECTION GAGES

Characters in the following sequence:

Item number (1, 2, 3, or 4)

D for deflection gage

Compass direction or center of slab (N, S, E, W, or C)

J for joint

Orientation of joint (T for transverse or L for longitudinal)

} Not used for gages
in center of slab.

EXAMPLE: 1DWJT would identify a deflection gage in item 1 west of the transverse joint.

b. STRAIN GAGES

Characters in the following sequence:

Item number (1, 2, 3, or 4)

S for strain gage

Compass direction or center of slab (N, S, E, W, or C)

J for joint. Not used for gages in the center of a slab.

Orientation of joint or gage (T for transverse or L for longitudinal)*

EXAMPLE: 2SNJL would identify a strain gage in item 2 north of the longitudinal joint.

c. PRESSURE CELLS

Characters in the following sequence:

Item number (1, 2, 3, or 4)

Depth of embedment below surface, ft (3 or 7). If no number appears, cell was at slab/subgrade interface.

P for pressure cell

Longitudinal coordinate**

Transverse coordinate**

EXAMPLE: 27P23 would identify a pressure cell in item 2 that was 7 ft below the surface at longitudinal coordinate 2, transverse coordinate 3.

d. PARTIAL DEFLECTION GAGES

Characters in the following sequence:

Item number (1, 2, 3, or 4)

Length of reference rod measured from bottom of slab, ft (3, 5, or 9)

PD for partial deflection gage

EXAMPLE: 23PD would identify a partial deflection gage that was installed to measure deformation at the 3-ft depth in item 2.

* All center strain gages were mounted on the top slab surface and were oriented in the longitudinal or transverse direction. All gages in the vicinity of a joint were mounted near the bottom slab/subgrade interface and were oriented parallel to the particular joint.

** Grid system shown in figure B32.

TABLE B2

SINGLE-WHEEL-ASSEMBLY STATIC TESTS

<u>GAGE*</u>	<u>15,000-lb WHEEL LOAD</u>	<u>22,500-lb WHEEL LOAD</u>	<u>UNITS</u>
<u>TEST POSITION 1</u>			
1DC	.013	-	in.
1DWJT	.002	.006	in.
1DEJT	.001	-.001	in.
1SCT	-	29	μin/in
1SCL	1	1	μin/in
1SSJL	2	1	μin/in
1SNJL	0	1	μin/in
1SWJT	1	2	μin/in
<u>TEST POSITION 2</u>			
1DC	.004	.015	in.
1DWJT	.002	.004	in.
1DEJT	.004	.005	in.
1DSJL	.009	-	in.
1DNJL	.011	-	in.
1SCT	-	7	μin/in
1SCL	1	3	μin/in
<u>TEST POSITION 3</u>			
1DC	.001	.008	in.
1DEJT	.013	-	in.
1DNJL	.002	.002	in.
1SCT	3	11	μin/in
1SCL	2	3	μin/in
1SEJT	12	22	μin/in
<u>TEST POSITION 4</u>			
2DC	.010	.013	in.
2DWJT	-	.007	in.
2DEJT	-	.001	in.
2DSJL	.002	.003	in.
2DNJL	.001	.002	in.
2SCT	16	25	μin/in
2SCL	7	8	μin/in
2SSJL	0	4	μin/in
2SNJL	0	2	μin/in
2SEST	1	0	μin/in
2SWJT	1	1	μin/in
<u>TEST POSITION 5</u>			
2DC	-	.004	in.
2DWJT	-	.003	in.
2DSJL	.009	.012	in.
2DNJL	.008	.009	in.
2SCT	2	4	μin/in
2SCL	1	2	μin/in
2SSJL	16	25	μin/in
2SNJL	2	10	μin/in

*See table B1 for gage identification system.

TABLE B2 (Continued)

<u>GAGE</u>	<u>15,000-16</u> <u>WHEEL LOAD</u>	<u>22,500-16</u> <u>WHEEL LOAD</u>	<u>UNITS</u>
<u>TEST POSITION 6</u>			
2DC	.001	.002	in.
2DWJT	.004	-	in.
2DEJT	.016	-	in.
2DSJL	.002	.005	in.
2DNJL	.002	.002	in.
2SCT	-	3	μin/in
2SCL	1	3	μin/in
2SSJL	1	1	μin/in
2SNJL	2	2	μin/in
<u>TEST POSITION 7</u>			
23PD		.006	in.
25PD		.010	in.
29PD		.018	in.
2P13		.6	psi
27P13		.7	psi
<u>TEST POSITION 8</u>			
2P11	-	1.5	psi
2P41	-	1.3	psi
2P51	-	-.4	psi
2P42	-	.1	psi
2P34	-	-.1	psi
2P44	-	-.1	psi
2P54	-	-.9	psi
23P23	-	.2	psi
<u>TEST POSITION 9</u>			
23PD	.007		in.
25PD	.007		in.
29PD	.010		in.
2P13	-1.7		psi
27P23	.4		psi
<u>TEST POSITION 10</u>			
2P11		4.8	psi
2P41		-5.6	psi
2P51		.4	psi
2P34		-1.5	
23P23		.5	psi
<u>TEST POSITION 11</u>			
3DC	.007	.009	in.
3DWJT	.002	.003	in.
3DEJT	.001	.001	in.
3DSJL	.002	.003	in.
3SCT	5	8	μin/in
3SCL	11	12	μin/in
3SSJL	0	2	μin/in
3SNJL	1	2	μin/in

TABLE B2 (Concluded)

<u>GAGE</u>	<u>15,000-lb WHEEL LOAD</u>	<u>22,500-lb WHEEL LOAD</u>	<u>UNITS</u>
<u>TEST POSITION 12</u>			
3DC	.001	.002	in.
3DWJT	.001	.002	in.
3DEJT	.001	.001	in.
3DSJL	.002	.011	in.
3SCT	1	3	μ in/in
3SCL	2	5	μ in/in
3SNJL	4	10	μ in/in
<u>TEST POSITION 13</u>			
3DC	.002	.002	in.
3DWJT	.008	.009	in.
3DEJT	.008	.010	in.
3DSJL	.003	.005	in.
3SCT	1	2	μ in/in
3SCL	2	2	μ in/in
3SEJT	-	11	μ in/in
<u>TEST POSITION 14</u>			
33PD		.005	in.
35PD		.009	in.
<u>TEST POSITION 15</u>			
4DC	.043		in.
4DNJL	.002		in.
4DSJL	.006		in.
<u>TEST POSITION 16</u>			
4DC	.038		in.
4DNJL	.040		in.
4DSJL	.051		in.

TABLE B3

PEAK VALUES OF SLOWLY MOVING 15,000-LB SINGLE-
WHEEL-ASSEMBLY INSTRUMENTATION TESTS

GAGE*	LANES												UNITS
	1		2		3		4		5		6		
	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST	
ITEM 1													
1DEJT	.005	-	.008	.008	.007	.009	.010	.011	-	.011	.005	.005	in.
1IWJT	.008	-	.012	.013	.014	.015	.017	.017	-	.019	.009	.009	in.
1DMJL	-	-	.013	-	.010	.010	.008	.009	-	.006	-	-	in.
13PD	.003	-	.004	.005	.003	.004	.003	.003	-	.002	.002	.002	in.
15PD	.006	-	.008	.010	.008	.008	.007	.007	-	.006	.001	.005	in.
19PD	.008	-	.011	.011	.011	.010	.008	.010	-	.007	.001	.001	in.
1SEJT							50	34		34			4in/in
1SCL									5	5	11	11	4in/in
ITEM 2													
2DNJL	.007	-	.006	.006	-	.006	.004	.005	.004	.004	-	-	in.
2DSJL	.010	-	.012	.006	.012	.002	.010	.006	.008	.006	.002	-	in.
2TC			.001		.002		.002		.003		.007		in.
23PD			.006		.006		.005		.004		.004		in.
29PD			.009		.008		.007		.006		.001		in.
2SEJT											4		4in/in
ITEM 3													
3DEJT	.004	.004	.004	.005	.005	.006	.006	.006	.001	.006	.003	.003	in.
3DWJT	.007	.007	.008	.008	.009	.009	.010	.011	.011	.011	.006	.006	in.
3DMJL	.015	.007	-	-	-	.006	.002	.002	.010	.011	-	.006	in.
3DSJL	.007	.006	.008	.006	.006	.006	.006	.006	-	-	.020	.016	in.
33PD	.003	.003	.005	.005	.004	.004	.003	.003	.003	.003	-	-	in.
35PD	.004	.004	.006	.005	.006	.004	.003	.004	.003	.003	-	-	in.
3SEJT	8	4	36	11	15				2	5			4in/in
3SNJL	19	26		49	45								4in/in
3SSJL	12												4in/in
3SCT											5		4in/in
ITEM 4													
4DC	.003	-	.010	-	.007	.007	.012	.016	.010	.015	.018	.018	in.
4DNJL	.040	.040	.030	.030	.022	.022	.016	.016	.013	.013	-	-	in.
4DSJL	.015	.017	.020	.019	.014	.014	.012	.012	.010	.009	-	-	in.

*See table B1 for gage identification system.

TABLE B4

PEAK VALUES OF SLOWLY MOVING 22,500-LB SINGLE-
WHEEL-ASSEMBLY INSTRUMENTATION TESTS

GAGE*	LANES												UNITS	
	1		2		3		4		5		6			
	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST		
	ITEM 1													
1DEJT	.008	.008	.013	.011	.013	.013	.014	.014	.014	.014	.008	.008	in.	
1DNJT	.008	.008	-	.008	.008	.008	.008	.008	.008	.008	.008	.008	in.	
1DNJL	.022	-	.019	.020	.019	.016	.013	.013	.012	.010	.002	.002	in.	
1DC				.016					.008		.004	.003	in.	
13PD	.005	.005	-	.007	.005	.005	.004	.004	.004	.003	-	-	in.	
15PD	.013	.012	-	.016	.007	.013	.008	.009	.008	.008	.002	.001	in.	
19PD	.013	.013	.011	.012	.012	.011	.012	.012	.010	.010	.002	.002	in.	
	ITEM 2													
2DNJL	.010	.012	.009	.010	.006	.008	.006	.008	.005	.006	.001	.002	in.	
2DSJL	.015	.010	.018	.010	.013	.010	.015	.008	.012	.007	.004	.002	in.	
2DC					.002		.004			.008		.014	in.	
23PD		.008		.010		.008		.007		.006		.001	in.	
25PD		.008		.011		.006		.011		.005		.001	in.	
29PD		.011		.013		.011		.010		.008		.002	in.	
2SSJL			38				26		19				in/in	
	ITEM 3													
3DEJT	.006	.005	.007	.007	.007	.008	.008	.008	.009	.009	.004	.004	in.	
3DNJT	.011	.010	.013	.013	.014	.014	.014	.015	.015	.016	.008	.008	in.	
3DSJL	.010	.008	.010	.010	.010	.009	.008	.008	.008	.007	.004	.002	in.	
3DC	.006	.010			.003	.003	.004	.004	.004	.006	.009	.010	in.	
33PD	.004	.005	.007	.007	.005	.006	.005	.005	.004	.004	-	.001	in.	
35PD	.006	.006	.008	.008	.007	.006	.006	.006	.005	.005	-	-	in.	
3SEJT	8	8	8	8	6	6	4	3	2	3			in/in	
3SNJL	45	34											in/in	

*See table B1 for gage identification system.

TABLE B5

TWIN-TANDEM-ASSEMBLY STATIC TESTS

GAGE*	POSITION	15,000-lb WHEEL LOAD	22,500-lb WHEEL LOAD	POSITION	15,000-lb WHEEL LOAD	22,500-lb WHEEL LOAD	UNITS
ITEM 1 - LOCATION - GAGE DC							
1DEJT	1	.000	.002	2	.030	.000	in.
1DWJT		.007	.003		.004	.002	in.
1DNJL		.008	.010		.014	.013	in.
1SEJT		6	8		3	5	µin/in
1SCL		21	34		29	10	µin/in
1SCT		52	5		12	11	µin/in
1DEJT	3	.000	.007	4	.000	.004	in.
1DWJT		.001	.001		.001	.001	in.
1DNJL		.006	.010		.011	.017	in.
1SEJT		3	11		5	0	µin/in
1SCL		19	16		10	38	µin/in
1SCT		7	13		8	3	µin/in
1DEJT	5	.000	.055	6	.001	.053	in.
1DWJT		.042	.062		.043	.061	in.
1DNJL		.013	.015		.013	.016	in.
1DC		-	-		-	.008	in.
1SEJT		19	46		17	38	µin/in
1SWJT		-	-		-	7	µin/in
1SNJL		1	1		-	7	µin/in
1SSJL		1	2		-	6	µin/in
1SCL		6	6		4	19	µin/in
1SCT		13	24		14	38	µin/in
1DEJT	7	.000	.054	8	-	-	in.
1DWJT		.041	.060		.046	-	in.
1DNJL		.015	.024		.009	-	in.
1DC		-	-		.003	-	in.
1SEJT		23	23		26	-	µin/in
1SCL		1	5		15	-	µin/in
1SCT		16	22		31	-	µin/in

* See table B1 for gage identification system.

TABLE B5 (Continued)

GAGE*	POSITION	15,000-lb WHEEL LOAD	22,500-lb WHEEL LOAD	POSITION	15,000-lb WHEEL LOAD	22,500-lb WHEEL LOAD	UNITS
<u>ITEM 1 - LOCATION GAGE DSJL</u>							
1DEJT	10	.001	.005	11	-	-	in.
1DWJT		.006	.010		.002	.003	in.
1DNJL		.039	.049		.036	.051	in.
1SEJT		2	3		3	8	µin/in
1SCL		11	8		3	7	µin/in
1SCT		20	0		8	7	µin/in
1DEJT	12	.000	.004				in.
1DWJT		.005	.010				in.
1DNJL		.045	.066				in.
1SEJT		17	7				µin/in
1SCL		16	9				µin/in
<u>ITEM 1 - LOCATION GAGE 13PD</u>							
13PD	10	.010	.012				in.
15PD		.006	-				in.
19PD		.038	.050				in.
<u>ITEM 1 - LOCATION GAGE 15PD</u>							
13PD	10	.009	.014				in.
15PD		.004	-				in.
19PD		.032	.058				in.
<u>ITEM 1 - LOCATION GAGE 19PD</u>							
13PD	10	.008	.015				in.
15PD		.004	-				in.
19PD		.041	.058				in.

TABLE B5 (Continued)

GAGE*	POSITION	15,000-lb WHEEL LOAD	22,500-lb WHEEL LOAD	POSITION	15,000-lb WHEEL LOAD	22,500-lb WHEEL LOAD	UNITS
ITEM 2 - LOCATION GAGE DC							
2DEJT	1	.004	.006	2	.006	.004	in.
2DWJT		.001	.015		.000	.003	in.
2DNJL		.005	.006		.008	.001	in.
2DSSL		-	.010		-	.003	in.
2DC		-	.019		-	.018	in.
2SEJT		0	1		0	2	μin/in
2SWJT		-	-		0	2	μin/in
2SNJL		11	21		-	11	μin/in
2SSJL		19	15		19	32	μin/in
2SCL		25	32		16	19	μin/in
2SCT		26	24		24	31	μin/in
2DEJT	3	.003	.008	4	.001	.010	in.
2DWJT		.005	.030		.000	.040	in.
2DNJL		.005	.015		.010	.010	in.
2DSJL		.008	.010		-	.015	in.
2DC		.026	.017		-	.018	in.
2SEJT		0	1		0	1	μin/in
2SWJT		0	0		0	1	μin/in
2SNJL		10	6		1	14	μin/in
2SSJL		10	14		23	30	μin/in
2SCL		16	26		53	29	μin/in
2SCT		22	26		16	33	μin/in
ITEM 2 - LOCATION GAGE DWJT							
2DNJL	5	.014	.015	6	.012	.018	in.
2DSJL		.013	.016		.013	.018	in.
2DC		.006	.007		.006	.005	in.
2SNJL		15	13		34	20	μin/in
2SSJL		1	13		13	11	μin/in
2SCT		8	5		12	1	μin/in
2SCL		27	12		10	4	μin/in
2DNJL	7	.017	.025				in.
2DSJL		.017	.024				in.
2DC		.005	.003				in.
2SNJL		12	27				μin/in
2SSJL		11	15				μin/in
2SCT		0	6				μin/in
2SCL		16	3				μin/in
2SEJT		0	2				μin/in

TABLE B5 (Continued)

GAGE*	POSITION	15,000-lb WHEEL LOAD	22,500-lb WHEEL LOAD	POSITION	15,000-lb WHEEL LOAD	22,500-lb WHEEL LOAD	UNITS
		<u>ITEM 2 - LOCATION</u>		<u>GAGE DS'L</u>			
2DNJL	10	.027	.039	11	.030	.044	in.
2DSJL		.026	.039		.029	.042	in.
2DC		.008	.008		.010	.012	in.
2SNJL		20	78		14	30	µin/in
2SSJL		34	32		19	10	µin/in
2SCL		6	14		13	15	µin/in
2SCT		9	9		20	9	µin/in
2DNJL	12	.035	.050				in.
2DSJL		.030	.044				in.
2DC		.004	.005				in.
2SNJL		38	20				µin/in
2SSJL		27	-				µin/in
2SCL		46	66				µin/in
2SCT		9	15				µin/in
		<u>ITEM 2 - LOCATION GAGE 23PD</u>					
23PD	10	.016	.035				in.
25PD		.022	.020				in.
29PD		.032	.049				in.
		<u>ITEM 2 - LOCATION GAGE 25PD</u>					
23PD	10	-	.022				in.
25PD		.020	.055				in.
29PD		.033	.030				in.
		<u>ITEM 2 - LOCATION GAGE 29PD</u>					
23PD	10	-	.038				in.
25PD		.019	.007				in.
29PD		.035	.049				in.

TABLE B5 (Continued)

GAGE	POSITION	15,000-lb WHEEL LOAD	22,500-lb WHEEL LOAD	POSITION	15,000-lb WHEEL LOAD	22,500-lb WHEEL LOAD	UNITS
ITEM 3 - LOCATION				GAGE DC			
3DEJT	1	.002	.003	2	.003	.003	in.
3DWJT		.003	.005		.006	.005	in.
3DSJL		.002	.002		.003	.008	in.
3DC		.022	.027		.021	.027	in.
3SEJT		3	5		7	-	µin/in
3SNJL		8	12		9	6	µin/in
3SCL		1	4		15	4	µin/in
3SCT		8	5		15	3	µin/in
3DEJT	3	.003	.001	4	.004	.004	in.
3DWJT		.004	.002		.006	.008	in.
3DSJL		.001	.001		.009	.010	in.
3DC		.022	.026		.021	.029	in.
3SEJT		6	7		2	9	µin/in
3SNJL		3	8		6	12	µin/in
3SCL		7	5		6	4	µin/in
3SCT		14	-		21	4	µin/in
ITEM 3 - LOCATION				DWJT			
3DEJT	5	.030	.034	6	.027	.033	in.
3DWJT		.021	.024		.020	.044	in.
3DSJL		.009	.008		.008	.010	in.
3DC		.009	.012		.007	.011	in.
3SNJL		0	0		1	3	µin/in
3SCL		10	-		4	-	µin/in
3SCT		9	-		14	-	µin/in
3DEJT	7	.028	.033	8	.033	.040	in.
3DWJT		.020	.024		.020	.027	in.
3DSJL		.012	.012		.008	.010	in.
3DC		.006	.009		.006	.009	in.
3SNJL		7	6		5	8	µin/in
3SCL		7	-		5	-	µin/in
3SCT		11	-		14	-	µin/in

TABLE B5 (Continued)

GAGE*	POSITION	15,000-lb WHEEL LOAD	22,500-lb WHEEL LOAD	POSITION	15,000-lb WHEEL LOAD	22,500-lb WHEEL LOAD	UNITS
<u>ITEM 3-LOCATION GAGE DWJT</u>							
3DEJT	9	.035	.039				in.
3DWJT		.022	.026				in.
3DSJL		.010	.007				in.
3DC		.004	.009				in.
3SNJL		8	9				µin/in
3SCL		5	-				µin/in
3SCT		10	-				µin/in
<u>ITEM 3-LOCATION GAGE DSJL</u>							
3DEJT	10	.006	.010	11	.004	.004	in.
3DWJT		.006	.007		.003	.005	in.
3DSJL		.018	.050		.017	.019	in.
3DC		.009	.014		.009	.013	in.
3SNJL		22	29		15	13	µin/in
3SCL		8	11		5	16	µin/in
3SCT		7	-		3	21	µin/in
<u>ITEM 3-LOCATION GAGE DSJL</u>							
3DEJT	12	.006	.008				in.
3DWJT		.005	.007				in.
3DSJL		.018	.023				in.
3DC		.006	.010				in.
3SNJL		22	33				µin/in
3SCL		11	16				µin/in
3SCT		16	16				µin/in
<u>ITEM 3 - LOCATION GAGE 33PD</u>							
33PD	10	.010	.017				in.
35PD		.023	.050				in.
<u>ITEM 3 - LOCATION GAGE 35PD</u>							
33PD	10	.012	.015				in.
35PD		.021	.028				in.

TABLE B5 (Concluded)

GAGE*	POSITION	15,000-lb WHEEL LOAD	22,500-lb WHEEL LOAD	POSITION	15,000-lb WHEEL LOAD	22,500-lb WHEEL LOAD	UNITS
		ITEM 4-LOCATION		GAGE DC			
4DNJL	1	.014		2	.013		in.
4DSJL		.026			.047		in.
4DNJL	3	.014		4	.002		in.
4DSJL		.020			.028		in.
		ITEM 4- LOCATION		GAGE DSJL			
4DNJL	10	.127		11	.147		in.
4DSSL		.081			.093		in.
4DNJL	12	.146					in.
4DSSL		.080					

TABLE B6
PEAK VALUES OF SLOWLY MOVING TWIN-TANDEM-ASSEMBLY
INSTRUMENTATION TESTS
15,000 lb/wheel

GAGE*	Lane												UNITS
	1		2		3		4		5		6		
	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST	
ITEM 1													
1DWJT	.040	.050	-	.080	.072	.056	.068	.060	.068	.060	.042	.040	in.
1DNJL	.010	.010	-	.008	.008	.008	.004	-	.004	.004	-	-	in.
1DC	.010	.012	-	.012	.016	.016	.012	.016	.016	.010	.006	.006	in.
13PD	.008	.008	-	.010	.008	.008	.008	.004	.004	.004	-	-	in.
19PD	.030	.020	-	.024	.026	.020	.020	.016	.016	.016	.006	.006	in.
1SCL							2	2	2	2	4	4	µin/in
ITEM 2													
2DEJT	.015		-		.016		.012		.010		.005		in.
2DWJT	.020		.064		.024		.020		.016		.008		in.
2DNJL	.008	-	.004	-	.012	-	.016	.014	-	-	.008	-	in.
2DSJL	.030	-	-	-	.020	-	.030	-	.024	-	.008	-	in.
2DC	-		.012		-		-		-		.004		in.
23PD	-		.008		-		-		-		-		in.
25PD	.036		-		-		-		-		-		in.
29PD	.008		.028		-		-		-		-		in.
2SNJL		21		16		21		21		11		-	µin/in
2SSJL		42		125		105		105		84.0		8	µin/in
2SWJT			29				57						µin/in
2SCT		11		-		21		21		42		16	µin/in
2P11		.6		.4		.5		.3		.3		-	psi
2P41		.3		.3		.1		-		.1		-	psi
2P51		.5		.6		.5		.3		.3		.1	psi
ITEM 3													
3DEJT	.014	.015	.016	.020	.022	.020	.024	.020	.020	.020	.016	.014	in.
3DWJT	.020	.016	.030	.028	.030	.024	.024	.016	.024	.016	.020	.012	in.
3DSJL	.016	.010	.032	.010	.020	.012	.016	.010	.012	.006	.004	.004	in.
3DC	.004	.004	-	.004	.008	.004	.010	.004	.010	.006	.010	.008	in.
33PD	-	.004	-	.006	.010	.004	.004	-	-	-	-	-	in.
35PD	.012	.010	-	.010	.012	.006	.010	.010	.008	.004	.004	-	in.
3SEJT	-	-	105	21	21	42	42	42	21	21	-	-	µin/in
3SWJT	-	-	42	-	-	-	-	-	-	-	-	-	µin/in
3SNJL	4	4	-	4									µin/in
ITEM 4													
4DNJL	.110	.128	.106	.106	.082	.078	.066	.062	.056	.054	.010	.010	in.
4DSJL	.072	.066	.076	.07	.058	.058	.048	.044	.040	.034	.008	.008	in.
4DC	-	-	-	-	-	-	-	-	.072	.070	.124	.118	in.

*See table B1 for gage identification system.

TABLE B7
PEAK VALUES OF SLOWLY MOVING TWIN-TANDEM-ASSEMBLY
INSTRUMENTATION TESTS
22,500 lb/wheel

Lane													
GAGE*	1		2		3		4		5		6		UNITS
	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST	
ITEM 1													
1DEJT	.095	.100	.060	.035	-	.050	.040	.050	.050	.050	.025	.025	in.
1DWJT	.075	.080	.072	.080	-	.075	.070	.080	.070	.080	.040	.040	in.
1DSJL	.075	.075	.048	-	-	-	-	-	-	-	.030	-	in.
1DC	-	-	-	-	-	-	.010	-	.010	.005	-	-	in.
13PD	.015	.015	.036	.010	-	-	.010	.010	.010	.010	-	-	in.
19PD	.030	.035	.072	.025	-	.035	.025	.020	.025	.020	.005	.016	in.
1SEJT											15		µin/in
1SNJL			18								20		µin/in
1SSJL			38								38		µin/in
1SCT			54								73		µin/in
ITEM 2													
2DEJT	.065		.092		.050		.020		-		.010		in.
2DWJT	.050		.124		.075		.030		-		.010		in.
2DNJL	.020	-	.020	-	-	-	.020	-	-	-	.035	.056	in.
2DSJL	.070	-	-	-	-	-	-	-	-	-	-	.112	in.
2DC	-		-		.010		.025		-		-		in.
23PD			.028		.020		.020		-		.010		in.
25PD	-	-	-		-		.020		-		.020		in.
29PD	-		.072		.025		.010		-		.030		in.
2SEJT			18								18		µin/in
2SNJL		16		11		11		5		8		11	µin/in
2SSJL		11		16		11		5		11		-	µin/in
2SCT		-		-		3		3		5		5	µin/in
2P11		.3		.4		.6		.4		.4		.4	psi
2P41		.1		.3		.3		.1		.3		-	psi
2P51		.7		.6		.6		.6		.6		.5	psi
27P13				.4								.4	psi
ITEM 3													
3DEST	.040	.085	.040	.060	.015	.035	.025	.025	.025	.015	.046	.020	in.
3DWJT	.040	.040	.050	.070	.040	.035	.030	.020	.035	.020	.056	.020	in.
3DSJL	.030	.010	.030	.020	-	.010	.005	.010	.005	.010	.052	-	in.
3DC	-	-	-	-	-	.010	.010	.005	.010	.015	.015	.015	in.
33PD	-	.010	.028	.005	.020	.005	.005	.005	.005	.005	.010	-	in.
39PD			.010								.010		in.
3SEJT	-	26	131	-	131	-	5	5	8	11	-	-	µin/in
3SWST	-	-	102	-	79	-	-	-	-	-	42	-	µin/in
3SNJL			13								15		µin/in
3SCL			2								21		µin/in
3SCT			16								42		µin/in

*See table B1 for gage identification system.

TABLE B8
12-WHEEL-ASSEMBLY STATIC TESTS

GAGE*	POSITION	15,000-lb WHEEL LOAD	22,500-lb WHEEL LOAD	POSITION	15,000-lb WHEEL LOAD	22,500-lb WHEEL LOAD	UNITS
ITEM 1 - LOCATION GAGE TWJT							
1DEJT	1	.000	.000	2	-	.000	in.
1TWJT		.011	.032		.011	.032	in.
1DNJL		.000	-		.000	-	in.
1DSJL		-	.020		-	.010	in.
1DC		.000	.005		.000	.007	in.
13PD		-	.001		-	.003	in.
1ECL		11	-		12	-	min/in
ITEM 1 - LOCATION GAGE DNJL							
1DEJT	3	.038	.000	4	.038	.000	in.
1TWJT		.000	.008		.000	.017	in.
1DSJL			.010			.000	in.
1TC			.007			.007	in.
13PD			.001			.000	in.
15PD			.010			.000	in.
1SSJL		5			3		min/in
1SWJT		10			8		min/in
1SCL		6			3		min/in
ITEM 1 - LOCATION GAGE DSJL							
1DEJT	5	.006	.000	6	.038	.000	in.
1TWJT		.006	.008		.030	.011	in.
1DSJL		-	.000		-	.010	in.
1DC		-	.009		-	.009	in.
13PD		.003	.003		.006	.004	in.
15PD		.007	.000		.007	.000	in.
1SMJL		1				0	min/in
1SSJL		0				1	min/in
1SWJT		2				1	min/in
1SCL		2				0	min/in
ITEM 1 - LOCATION GAGE IC							
1DEJT	7	.011	.026	8	.033	.026	in.
1TWJT		.008	.013		.027	.030	in.
1DSJL		-	.014		-	.014	in.
1DC		-	.033		-	.033	in.
13PD		.004	.015		.005	.015	in.
15PD		.007	.000		.007	.000	in.
1SNJL		1			1		min/in
1SSJL		1			1		min/in
1SWJT		2			2		min/in
1SCL		13			23		min/in

*See table B1 for gage identification system.

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TABLE B8 (Continued)

GAGE*	POSITION	15,000-lb WHEEL LOAD	22,500-lb WHEEL LOAD	POSITION	15,000-lb WHEEL LOAD	22,500-lb WHEEL LOAD	UNITS
ITEM 2 - LOCATION GAGE IWJT							
2DEJT	1	.014	-	2	.014	-	in.
2DNJT		.015	-		-	.060	in.
2DNJL		.012	.069		-	.063	in.
2IC		.014	.031		.009	.010	in.
23PD			.021			.021	in.
25PD			.010			-	in.
2SCL		1.6			1.5		min/in
2SNJL		0	2		0	2	min/in
2SCT		-	4		-	1	min/in
ITEM 2 - LOCATION GAGE ISJL							
2DEJT	2	.014	.000	4	-	-	in.
2DNJT		.000	.007		-	-	in.
2DNJL		.019	-		.013	.067	in.
2DSJL		.010	.021		.008	.023	in.
2IC		.018	.041		-	.041	in.
23PD			.029			.022	in.
2SCL		1			1		min/in
2SNJL		0	1		0	1	min/in
2SSJL		5	0		3	0	min/in
2SCT		3	8		2	3	min/in
ITEM 2 - LOCATION GAGE ISJL							
2IWJT	5	-	-	6	-	.006	in.
2DNJL		.046	.102		.041	.102	in.
2DSJL		.047	.024		.043	.025	in.
2IC		-	.041		-	.041	in.
23PD		.010	.033		.014	.047	in.
25PD		.007	-		.007	-	in.
2SCL		3	-		-	-	min/in
2SNJL		1	2		0	1	min/in
2SCT		-	17		-	17	min/in

TABLE B8 (Continued)

GAGE*	POSITION	15,000-lb WHEEL LOAD	22,500-lb WHEEL LOAD	POSITION	15,000-lb WHEEL LOAD	22,500-lb WHEEL LOAD	UNITS
<u>ITEM 2- LOCATION GAGE 2DC</u>							
2DEJT	7	.001	.026	8	.000	.032	in.
2DNJT		-	.019		-	.019	in.
2DNJL		.029	.031		.021	.040	in.
2DSJL		.031	.031		.025	.030	in.
2DC		-	.009		-	.020	in.
23PD		.012	.006		.013	.006	in.
25PD		.007	.020		.007	.020	in.
2SCL		3			3		min/in
2SCT		-	9		-	21	min/in
<u>ITEM 2- LOCATION GAGE 2DC</u>							
2DEJT	9	-		10	.018	-	in.
2DNJL		.042			.039		in.
2DSJL		.022			.022		in.
23PD		.018			-		in.
2SNJL		6			6		min/in
2SCT		6			4		min/in
<u>ITEM 2- LOCATION GAGE 2DC</u>							
2DEJT	11	.001		12	.001		in.
2DNJL		.024			.021		in.
2DSJL		.025			.025		in.
2SCL		3			3		min/in
<u>ITEM 2- LOCATION GAGE 2DC</u>							
2DEJT	13	.001		14	.001		in.
2DNJL		.025			.026		in.
2DSJL		.029			.029		in.

TABLE B8 (Continued)

GAGE*	POSITION	15,000-lb WHEEL LOAD	22,500-lb WHEEL LOAD	POSITION	15,000-lb WHEEL LOAD	22,500-lb WHEEL LOAD	UNITS
<u>ITEM 3-LOCATION GAGE DWJT</u>							
3DEJT	1	.026	.034	2	.032	.047	in.
3DWJT		.005	.015		.004	.015	in.
3DSJL		-	.012		-	.008	in.
3DC		.023	.041		.015	.031	in.
33PD		-	.013		-	.040	in.
3SEJT		2		2			in/in
3SNJL		2		2			in/in
3SCL		5		3			in/in
<u>ITEM 3-LOCATION GAGE DSJL</u>							
3DEJT	3	.004	.013	4	.036	.034	in.
3DWJT		.011	.006		.003	.016	in.
3DSJL		-	.013		-	.014	in.
3DC		.026	.061		.024	.061	in.
33PD		-	.013		-	.007	in.
3SEJT		2		2			in/in
3SNJL		3		3			in/in
3SCL		17		12			in/in
<u>ITEM 3-LOCATION GAGE DCJL</u>							
3DEJT	5	.013	.009	6	.049	.036	in.
3DWJT		.011	.005		.030	.015	in.
3DSJL		-	.014		-	.015	in.
3DC		-	.041		-	.041	in.
33PD		.016	.013		.019	.007	in.
3SPD		.007	-		.006	-	in.
3SEJT		1		2			in/in
3SCL		11		9			in/in
3SCT		3		3			in/in
<u>ITEM 3-LOCATION GAGE DC</u>							
3DEJT	7	.007	.021	8	.021	.042	in.
3DWJT		.016	.019		.032	.026	in.
3DSJL		-	.016		-	.018	in.
3DC		-	.020		-	.023	in.
33PD		.003	.024		.004	.024	in.
3SPD		.006	-		.002	-	in.
3SEJT		1		11			in/in
3SCT		15		22			in/in

TABLE B8 (Concluded)

GAGE*	POSITION	15,000-lb WHEEL LOAD	22,500-lb WHEEL LOAD	POSITION	15,000-lb WHEEL LOAD	22,500-lb WHEEL LOAD	UNITS
<u>ITEM 4 - LOCATION</u>							
LIC	3	.011		4	.007		in.
LDSJL		.042			.043		in.
LWJT		.008			.009		in.
<u>ITEM 4 - LOCATION</u>							
LDC	5	.003		6	.006		in.
LDSJL		.040			.042		in.
LWJT		.007			.006		in.
<u>ITEM 4 - LOCATION</u>							
LDC	7	.014		8	.015		in.
LDSJL		.019			.021		in.
LWJT		.004			.005		in.

TABLE B9
PEAK VALUES OF SLOWLY MOVING 12-WHEEL-ASSEMBLY
INSTRUMENTATION TESTS
15,000 lb/wheel
Lane

GAGE*	1		2		3		4		5		6		UNITS
	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST	
ITEM 1													
1DEJT	.060	.060	.060	.060	.060	.060	.060	.060	.060	-	.010	.010	in.
1DWJT	.068	.068	.068	.064	.064	.061	.063	.063	.059	.054	.013	.009	in.
1DNJL	.038	.038	.038	.036	.030	.038	.030	.030	.032	.030	.030	.036	in.
1DC	.074	.074	.074	.071	.079	.074	.079	.079	.081	.079	.081	.071	in.
1SPD	.010	.007	.008	.007	.007	.007	.007	.007	.007	.007	.007	.007	in.
1SEJT	-	-	-	-	-	-	-	-	-	-	-	.21	μin/in
1SWJT	40	40	40	40	40	40	40	40	40	40	59	38	μin/in
1SNJL	81	81	81	81	83	81	83	83	79	79	83	51	μin/in
1SSJL	-	53	-	-	-	53	-	-	-	53	-	53	μin/in
1SCL	65	65	65	65	65	65	65	65	65	65	65	65	μin/in
1SCT	65	65	65	65	65	23	65	65	65	26	65	26	μin/in
ITEM 2													
2DEJT		.010		.010		.010		.010		-		-	in.
2DNJL	.031		.029		.026		.025		.025		.056		in.
2DSJL	.057		.052		.011		.045		.043		.041		in.
2DC		.033		.031		.043		.043		.040		.050	in.
23PD		-		.001		.001		.004		.013		.013	in.
25PD		.007		.007		.007		.007		.007		.007	in.
2SCL		23		23		23		23		23		23	μin/in
2SCT	2		2		2		2		2		2		μin/in
2SNJL	11		10		2		8		7		9		μin/in
2P11	2		2		2		2		1		1		psi
2P13		1		1		1		1		1		1	psi
2P44	.5		.5		.5		.4		.5		.5		psi
2P54	-		-		-		-		-		.8		psi
23P13		1		1		1		1		1		1	psi
27P13		.2		.2		.7		.3		.2		.2	psi
27P23	.2		.2		.7		.7		.7		1.7		psi
ITEM 3													
3DEJT	.033	.033	.034	.033	.033	.033	.033	.032	.032	.032	.056	.029	in.
3DWJT	.024	-	.034	.023	.022	.023	.023	.022	.051	.049	.048	.014	in.
3DNJL	.063	.059	.059	.057	.052	.057	.057	.052	.050	.052	.055	.054	in.
3DC	.029	.026	.029	.024	.024	.017	.021	.012	.021	.019	.019	.019	in.
33PD	.007	.005	.005	.005	.005	.005	.005	.003	.010	.010	.010	.009	in.
39PD	.012	.012	.012	.012	.012	.002	.011	.002	.012	0	.002	.002	in.
3SEJT	61	59	57	59	59	59	62	61	42	-	66	42	μin/in
3SSJL	117	117	117	117	117	117	117	117	119	119	119	119	μin/in
3SCL	198	208	202	208	205	208	208	208	198	208	205	208	μin/in
3SCT	78	78	78	78	78	78	78	78	78	72	78	78	μin/in
ITEM 4													
4DC	.130	.115	.088	.115	.040	.026	.017	.014	.030	.026	.035	.034	in.
4DSJL	.020	.023	.008	.023	.018	.016	.018	.015	.022	.008	.013	.010	in.
4DWJT	.078	.096	.071	.096	.050	.051	.070	.031	.049	.002	.060	.053	in.

*See table B1 for gage identification system.

TABLE B10
PEAK VALUES OF SLOWLY MOVING 12-WHEEL-ASSEMBLY
INSTRUMENTATION TESTS
22,500 lb/wheel

GAGE*	Lane												UNITS
	1		2		3		4		5		6		
	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST	
ITEM 1													
1DEJT	-	.049	.027	.025	.025	.025	.025	.025	.026	.026	.026	-	in.
1DWJT	.005	.005	.007	.007	.005	.007	.009	.009	.007	.011	.011	.007	in.
1DSJL	.014	.012	.013	.013	.019	.019	.012	.013	.014	.015	.012	.014	in.
1DC	.002	.002	0	0	.002	0	.002	.002	0	.005	.005	0	in.
13PD	.009	-	.028	.021	.023	.022	.022	.022	.022	.021	.021	-	in.
19PD	.048	.044	.036	.036	.036	.024	.018	.016	.008	.004	.002	0	in.
1SNJL	2	2	2	2	2	2	2	2	2	2	2	2	µin/in
1SSJL	-	-	-	-	-	-	-	-	-	-	-	57	µin/in
1SCL	-	-	-	-	-	-	-	-	-	-	-	68	µin/in
1SCT	-	-	-	-	-	-	-	-	-	-	-	10	µin/in
ITEM 2													
2DEJT		.052		.042		.040		.038		.036		-	in.
2DWJT		.002		.002		0		0		.002		0	in.
2DNJL	.052		.027		.027		.027		.027		.027		in.
2DSJL	.045	.011	.038	0	.029	0	.029	0	.025	0	.036	-	in.
2DC		.024		.017		.005		.002		0		.005	in.
23PD		.015		-		-		-		-		-	in.
29PD		.058		.048		.034		.034		.030		.024	in.
2SEJT		15		15		15		15		15		15	µin/in
2SSJL	40		64		59		51		49		44		µin/in
2SCL		120		120		120		120		120		120	µin/in
2SCT	16		20		26		26		26		29		µin/in
2P34	.8		.8		.8		.8		.8		.8		psi
2P42	1.3		1.3		1.4		1.4		1.4		1.3		psi
27P13	-	-	-	-	-	-	-	-	-	-	-	1.3	psi
ITEM 3													
3DEJT	.044	.044	.044	.042	.041	.041	.040	.039	.039	.035	.035	-	in.
3DWJT	.050	.052	.054	.052	.050	.048	.046	.045	.048	.043	.036	.036	in.
3DSJL	.023	.021	.021	.009	.019	.019	.019	.018	.022	.017	.015	-	in.
3DC	.024	.024	.024	.021	.021	.020	.017	.017	.017	.015	.012	.010	in.
33PD	.043	.040	.037	.011	.014	.039	.036	.037	.037	.036	.036	-	in.
35PD	-	-	-	-	-	-	-	-	-	-	-	.032	in.
39PD	-	-	-	-	-	-	-	-	-	-	-	.006	in.
3SNJL	38	38	38	38	38	38	38	38	38	38	38	38	µin/in
3SSJL	34	34	34	34	34	34	34	34	34	34	34	34	µin/in
3SWJT	1	1	0	0	2	2	2	2	0	0	-	3	µin/in
3SCL	65	62	68	65	65	65	85	81	75	72	94	81	µin/in
3SCT	9	9	10	12	13	13	14	14	14	16	17	19	µin/in

*See table B1 for gage identification system.

TABLE B11
6-WHEEL-ASSEMBLY STATIC TESTS
22,500 lb/wheel

GAGE*	POSITION	POSITION	POSITION	POSITION	POSITION	UNITS			
ITEM 1									
1DEJT	2	.040	4	.040	6	.040	8	.040	in.
1DSJL		.001		.002		.000		.002	in.
1DC		.003		.003		.003		.040	in.
1SEJT		-		1		1		1	in/in
1SWJT		1		-		7		-	in/in
1SNJL		3		3		-		3	in/in
1SSJL		6		6		5		6	in/in
1SCL		6		6		6		7	in/in
1SCT		2		1		1		2	in/in
ITEM 2									
2DEJT	2	.040	4	.040	6	.040	8	.040	in.
2DSJL		.017		.027		-		.020	in.
2DNJL		-		.004		-		.001	in.
2DC		.001		.005		.002		.005	in.
2SWJT		1		-		-		1	in/in
2SSJL		-		7		-		6	in/in
2SCL		4		2		2		4	in/in
2SCT		2		1		1		2	in/in
2DEJT	10	.004	11	.004	12	-	13	.004	in.
2DSJL		.026		.021		-		.021	in.
2DC		.040		.060		-		.050	in.
23PD		.003		.002		-		.002	in.
2SWJT		-		2		-		2	in/in
2SSJL		6		-		6		6	in/in
2SCL		3		4		-		4	in/in
2SCT		2		-		-		5	in/in
ITEM 3									
3DEJT	2	.030	4	-	6	.013	8	.015	in.
3DSJL		.010		-		.060		.020	in.
3DC		.007		-		.006		.020	in.
33PD		.014		-		.013		.018	in.
35PD		.014		.021		.021		.023	in.
3SNJL		1		1		1		1	in/in
3SSJL		2		2		2		2	in/in
3SCL		6		6		6		6	in/in
3SCT		15		15		15		15	in/in

*See table B1 for gage identification system.

TABLE B12
PEAK VALUES OF SLOWLY MOVING 6-WHEEL-ASSEMBLY
INSTRUMENTATION TESTS
22,500 lb/wheel

GAGE*	LANES												UNITS
	1		2		3		4		5		6		
	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST	
	ITEM 1												
1DEJT	.026	.026	.026	.026	.026	.026	.026	.026	.026	.026	.026	.026	in.
1FWJT	.018	.018	.018	.018	.018	.018	.018	.018	.018	.018	.018	.018	in.
1DSJL	.056	.056	.058	.058	.058	.058	.056	.056	.058	.058	.056	.056	in.
13PD	.017	.017	.017	.017	.017	.017	.017	.017	.017	.017	.017	.017	in.
1SEJT	2	2	2	2	2	2	2	2	2	2	2	2	min/in
1SNJL	27	27	27	27	27	27	27	27	27	27	27	27	min/in
LSCL	46	46	46	42	42	46	46	42	37	42	42	42	min/in
LSCT	7	7	6	6	3	4	3	5	2	3	2	2	min/in
	ITEM 2												
2DEJT		.022		.022		.029		.030		.030		.022	in.
2DWJT	.035	.035	.035	.035	.035	.035	.035	.035	.035	.035	.035	.035	in.
2DNJL	.027		.029		.027		.016		.029		.028		in.
2DSJL		.074		.068		.060		.056		.052		.042	in.
2DC		.014		.009		.012		.007		.007		.005	in.
23PD		.046		.046		.041		.038		.047		.043	in.
2SEJT		11	11	11		11		11		11		11	min/in
2SNJL		13		13		13		13		13		13	min/in
2SSJL	17		17		17		17		17		17		min/in
2P34	7		7		7		6		2		3		psi
2P44					2				1		1		psi
27P13		-2		-2		-2		-2		-2		-2	psi
27P23	-0.3		-0.3		-0.3		-0.3		-0.3		-0.3		psi
	ITEM 3												
3DEJT	.057	.057	.057	.056	.055	.054	.054	.053	.052	.052	.049	.049	in.
3DSJL	.024	.024	.024	.024	.022	.022	.022	.022	.010	.018	.016	.016	in.
3DC	.038	.038	.033	.036	.029	.031	.024	.026	.029	.026	.026	.026	in.
33PD	.004	.004	.004	.004	.004	.004	.004	.004	.004	.004	.004	.006	in.
35PD	.067	.067	.067	.067	.067	.067	.067	.067	.067	.067	.067	.067	in.
39PD	.049	.013	.040	.035	.017	.018	.013	.013	.009	.005	.013	.009	in.
3SNJL	11	11	11	11	11	11	11	11	11	11	11	11	min/in
3SSJL	17	17	17	17	17	17	17	17	17	17	17	17	min/in
3SCL	88	85	85	85	85	85	85	85	85	85	85	85	min/in
3SCT	9	9	9	9	9	7	7	5	9	9	7	7	min/in

*See table B1 for gage identification system.

TABLE B13

SUPPLEMENTAL STRAIN MEASUREMENTS
 Southwest Panel of Test Item 2
 Single-Wheel Load of 30,000 lb

Distance from East Pavement Edge, in.	STRAIN GAGE READINGS*									
	127E	90E	60E	30E	0E	120N	90N	60N	30N	0N
150	0	14C	17T	14C	9T	0	0	0	0	0
125	0	0	12T	12T	7T	6C	3C	6C	2C	1C
100	0	13C	1T	11C	8T	0	0	6C	5C	5C
75	0	2T	16C	2T	7T	0	0	8C	5C	8C
50	0	7T	6T	16C	5C	3C	2C	1C	7C	14C
25	0	7T	9T	0	19C	9C	6C	14C	9C	17C
0	0	11T	17T	15T	13C	20C	15C	24C	19C	19C

*All strains in $\mu\text{in./in.}$
 C indicates compression
 T indicates tension

TABLE B14
 SUPPLEMENTAL STRAIN MEASUREMENTS
 Southwest Panel of Test Item 2
 Twin-Tandem Load of 15,000 lb/Wheel

		STRAIN GAGE READINGS *									
		127E	90E	60E	30E	0E	120N	90N	60N	30N	0N
Initial Reading	GAGE		5C	0	0	10C	5C	3T	6C	28C	20C
Load in Position INOPERABLE for 15 minutes			8C	5C	3C	11C	13C	9T	10C	30C	20C

*All strains in $\mu\text{in./in.}$
 C indicates compression
 T indicates tension

TABLE B15
12-WHEEL-ASSEMBLY TRAFFIC TESTS
CAGE NO. 13 PD TEST ITEM NO. 1 DEFLECTION IN INCHES

		TRAFFIC LINES																					
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
		PASS NUMBER																					
PATTERN		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	.012	.009	.012	.012	.015	.016	.016	.016	.019	.020	.022	.020	.024	.017	.020	.017	.017	.015	.017	.014	.012	.010	.011
2	.008	.010	.011	.016	.016	.016	.015	.015	.015	.021	.018	.019	.025	.025	.021	.024	.021	.021	.022	.014	.016	.012	.012
3	.008	.010	.012	.014	.016	.017	.016	.016	.016	.019	.018	.021	.025	.025	.021	.024	.021	.021	.022	.017	.014	.013	.010
4	.010	.010	.013	.013	.020	.020	.020	.020	.021	.026	.027	.027	.029	.029	.024	.025	.024	.024	.021	.016	.017	.014	.010
5	.012	.015	.018	.019	.025	.024	.024	.022	.022	.026	.029	.028	.030	.030	.024	.025	.024	.024	.021	.016	.017	.014	.010
7	.013	.013	.019	.017	.024	.026	.027	.027	.026	.031	.031	.031	.032	.025	.027	.022	.026	.026	.026	.019	.020	.016	.014
10	.025	.025	.017	.020	.032	.037	.027	.028	.043	.036	.036	.035	.036	.027	.033	.031	.035	.034	.033	.025	.028	.021	.021
13	.018	.020	.024	.019	.030	.040	.036	.033	.033	.039	.041	.041	.041	.039	.032	.038	.038	.040	.041	.037	.030	.028	.022
15	.022	.021	.030	.031	.039	.040	.037	.035	.035	.042	.041	.040	.041	.035	.033	.040	.038	.041	.040	.031	.031	.023	.019
18	.034	.026	.029	.034	.038	.047	.037	.037	.035	.037	.044	.044	.048	.046	.037	.036	.046	.044	.043	.038	.036	.031	.028
20	.024	.028	.030	.030	.036	.041	.038	.037	.038	.040	.047	.048	.049	.041	.039	.039	.045	.042	.042	.039	.036	.030	.024
24	.020	.023	.024	.030	.035	.032	.040	.040	.036	.038	.044	.040	.043	.039	.035	.039	.040	.039	.038	.034	.031	.029	.025
25	.023	.025	.028	.032	.040	.040	.040	.040	.036	.038	.044	.042	.053	.040	.039	.039	.040	.040	.040	.038	.033	.025	.024
29	.029	.033	.037	.041	.046	.052	.043	.044	.049	.053	.054	.054	.053	.052	.044	.045	.050	.050	.045	.044	.039	.036	.031
33	.025	.026	.033	.036	.044	.047	.044	.044	.046	.051	.055	.055	.053	.050	.043	.045	.048	.052	.050	.044	.040	.033	.028
35	.025	.025	.038	.038	.047	.048	.040	.043	.049	.052	.053	.053	.050	.041	.041	.048	.047	.047	.047	.039	.040	.025	.027
38	.027	.027	.040	.040	.050	.051	.046	.041	.056	.056	.054	.052	.054	.043	.042	.049	.051	.048	.052	.038	.039	.025	.023
44	.024	.032	.043	.042	.048	.049	.046	.043	.057	.054	.053	.052	.052	.042	.041	.046	.047	.044	.047	.037	.041	.024	.023
50	.021	.023	.037	.040	.043	.046	.039	.040	.055	.052	.052	.052	.049	.040	.036	.044	.046	.042	.046	.036	.040	.022	.020
56	.020	.023	.036	.038	.044	.046	.046	.040	.055	.053	.052	.052	.052	.038	.040	.044	.044	.044	.046	.035	.038	.020	.024
65	.020	.020	.038	.040	.044	.048	.045	.042	.055	.055	.055	.055	.055	.040	.040	.044	.044	.044	.045	.032	.034	.020	.026
74	.028	.023	.044	.052	.056	.052	.052	.052	.065	.062	.065	.064	.062	.058	.058	.052	.054	.054	.052	.042	.048	.024	.028
83	.021	.027	.039	.045	.051	.048	.048	.049	.062	.058	.060	.060	.058	.048	.041	.048	.048	.048	.046	.040	.044	.023	.025
92	.021	.026	.036	.042	.047	.048	.049	.039	.060	.060	.060	.060	.058	.048	.047	.047	.047	.047	.047	.037	.043	.018	.025
101	.021	.024	.036	.043	.048	.042	.046	.046	.060	.059	.059	.059	.058	.047	.046	.049	.046	.050	.046	.039	.043	.020	.029
110	.020	.021	.032	.033	.044	.042	.044	.040	.059	.052	.057	.050	.050	.046	.042	.042	.044	.044	.044	.034	.035	.020	.019
119	.024	.027	.037	.040	.038	.043	.048	.048	.060	.058	.058	.058	.057	.042	.042	.050	.050	.050	.052	.040	.043	.020	.020
128	.023	.024	.036	.044	.044	.052	.048	.047	.058	.060	.057	.057	.058	.048	.047	.047	.053	.048	.048	.040	.046	.020	.020
137	.022	.024	.043	.051	.056	.060	.050	.050	.070	.067	.067	.067	.066	.048	.052	.054	.056	.056	.054	.044	.048	.022	.025
146	.025	.030	.042	.053	.060	.057	.057	.057	.070	.070	.070	.072	.072	.052	.050	.057	.056	.056	.057	.048	.050	.022	.024
155	.024	.028	.040	.048	.052	.052	.052	.052	.070	.066	.066	.066	.066	.056	.052	.052	.052	.052	.050	.040	.048	.020	.024
164	.020	.020	.040	.046	.050	.050	.050	.050	.060	.056	.056	.060	.056	.040	.040	.048	.048	.048	.048	.036	.040	.020	.020
173	.020	.020	.040	.046	.050	.050	.050	.050	.060	.056	.056	.060	.056	.040	.040	.048	.048	.048	.048	.036	.040	.020	.020

Sheet 1 of 30

TABLE B15 (Continued)

PATTERN	PASS NUMBER																					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
182	.024	.028	.036	.044	.052	.048	.044	.048	.060	.060	.060	.060	.044	.048	.048	.056	.052	.048	.036	.044	.020	.024
191	.024	.024	.040	.044	.044	.052	.048	.048	.063	.064	.062	.063	.044	.044	.050	.056	.052	.052	.040	.044	.020	.024
200	.020	.030	.040	.048	.048	.048	.048	.044	.062	.062	.062	.064	.040	.048	.052	.056	.052	.056	.036	.052	.016	.024
209	.020	.024	.035	.043	.048	.049	.046	.042	.056	.054	.055	.055	.045	.041	.046	.045	.048	.048	.035	.038	.017	.023
218	.024	.019	.038	.030	.041	.044	.042	.041	.049	.053	.052	.052	.036	.040	.044	.044	.044	.044	.039	.031	.022	.020
233	.020	.024	.032	.036	.044	.044	.044	.040	.056	.056	.056	.052	.040	.044	.048	.052	.048	.052	.032	.040	.016	.028
242	.020	.024	.032	.044	.044	.044	.044	.040	.056	.060	.052	.052	.040	.040	.044	.044	.044	.044	.036	.044	.020	.020
251	.032	.036	.056	.068	.068	.072	.064	.068	.088	.084	-	-	.084	.080	.060	.076	.072	.076	.060	.064	.028	.036
260	.032	.040	.064	.076	.068	.068	.068	.080	.088	.088	.088	.092	.068	.080	.068	.072	.072	.072	.060	.072	.032	.044
269	.032	.036	.056	.062	.072	.072	.072	.068	.088	.088	.088	.088	.068	.072	.068	.064	.072	.068	.060	.072	.032	.040
278	.028	.036	.052	.064	.064	.068	.060	.064	.080	.080	.080	.080	.060	.068	.064	.064	.064	.058	.052	.064	.028	.036
287	.029	.040	-	-	.068	.073	.066	.062	.085	.085	.084	.084	.056	.058	.066	.070	.068	.073	.049	.066	.022	.037
296	-	-	-	-	.064	.065	.064	.064	.080	.078	.076	.082	.058	.060	.062	.070	.068	.066	.048	.060	.024	.040
311	.026	.035	.047	.056	.064	.065	.058	.058	.080	.080	.078	.078	.057	.058	.062	.068	.066	.066	.046	.058	.025	.028

TABLE B15 (Continued)
CASE NO. 19FD TEST ITEM NO. 1 DEFLECTION IN INCHES

PATTERN	TRAFFIC LINES																					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	.054	.062	.067	.066	.087	.085	.093	.096	.104	.109	.102	.112	.098	.085	.086	.083	.085	.086	.069	.067	.053	.054
2	.054	.052	.060	.068	.085	.088	.096	.098	.109	.113	.104	.111	.095	.096	.085	.064	.082	.085	.068	.067	.054	.055
3	.053	.055	.070	.066	.075	.088	.091	.098	.102	.103	.108	.107	.097	.098	.086	.086	.084	.085	.071	.071	.056	.052
4	.052	.050	.061	.065	.085	.084	.096	.096	.103	.111	.104	.111	.096	.096	.085	.064	.082	.085	.068	.067	.054	.052
5	.051	.051	.068	.067	.082	.084	.094	.098	.108	.108	.108	.108	.096	.096	.085	.064	.082	.085	.068	.067	.054	.052
7	.055	.051	.071	.065	.087	.086	.096	.098	.109	.108	.108	.108	.096	.096	.086	.084	.084	.085	.068	.067	.054	.052
10	.070	.068	.057	.051	.085	.087	.089	.092	.112	.107	.110	.109	.094	.092	.087	.079	.083	.086	.070	.065	.055	.051
15	.045	.054	.060	.073	.078	.092	.094	.096	.102	.115	.109	.119	.109	.102	.097	.095	.092	.097	.084	.076	.062	.054
18	.060	.053	.076	.075	.095	.091	.098	.098	.115	.113	.118	.113	.101	.096	.097	.093	.092	.095	.080	.073	.062	.053
20	.041	.055	.056	.075	.073	.095	.093	.099	.102	.115	.110	.113	.110	.108	.101	.097	.092	.095	.085	.081	.059	.057
24	.059	.059	.065	.084	.089	.100	.099	.104	.111	.121	.120	.120	.110	.108	.101	.101	.101	.101	.087	.081	.066	.058
25	.049	.059	.060	.077	.078	.078	.089	.096	.101	.116	.114	.117	.112	.098	.091	.093	.090	.093	.076	.066	.058	.058
29	.053	.059	.062	.076	.085	.099	.099	.098	.103	.115	.117	.121	.114	.108	.100	.116	.094	.099	.087	.079	.067	.059
33	.060	.061	.071	.089	.098	.113	.109	.119	.125	.143	.147	.148	.136	.126	.124	.132	.128	.136	.116	.105	.087	.076
35	.072	.076	.082	.106	.113	.127	.120	.116	.131	.155	.152	.148	.136	.126	.124	.132	.128	.136	.116	.105	.087	.076
38	.070	.066	.095	.092	.110	.113	.106	.107	.143	.135	.139	.134	.111	.112	.122	.112	.126	.112	.098	.095	.068	.069
44	.077	.067	.108	.096	.137	.117	.127	.108	.156	.152	.152	.141	.123	.113	.132	.130	.130	.124	.107	.120	.083	.073
50	.077	.080	.117	.113	.133	.127	.130	.120	.166	.152	.160	.150	.129	.113	.132	.130	.130	.124	.120	.104	.075	.076
56	.080	.075	.116	.109	.130	.118	.128	.123	.162	.143	.157	.138	.131	.121	.139	.130	.139	.133	.124	.113	.085	.078
65	.080	.079	.116	.108	.141	.128	.137	.124	.169	.160	.165	.152	.130	.131	.147	.141	.146	.137	.126	.114	.081	.080
74	.058	.084	.125	.120	.149	.138	.144	.140	.175	.156	.172	.160	.144	.132	.152	.136	.150	.136	.132	.120	.090	.086
83	.120	.120	.190	.160	.190	.180	.190	.165	.215	.200	.215	.200	.170	.170	.180	.170	.180	.175	.165	.160	.130	.120
92	.120	.111	.172	.148	.186	.162	.196	.180	.230	.200	.223	.201	.176	.170	.190	.168	.187	.163	.182	.170	.121	.108
101	.121	.116	.170	.163	.182	.170	.170	.147	.217	.200	.212	.200	.170	.176	.195	.169	.196	.170	.158	.162	.115	.117
110	.125	.110	.171	.168	.187	.170	.175	.165	.225	.200	.218	.200	.170	.161	.198	.170	.200	.170	.170	.162	.120	.120
119	.111	.109	.159	.145	-	.171	.172	.164	-	-	.182	.168	.160	.160	.181	.166	.178	.164	.157	.136	.118	.111
128	.130	.130	.185	.140	.190	.170	.180	.170	.220	.200	.220	.200	.175	.150	.190	.180	.190	.175	.165	.150	.125	.115
137	.130	.120	.183	.175	.215	.200	.205	.182	.260	.225	.262	.235	.215	.195	.225	.210	.225	.200	.195	.177	.130	.120
146	.141	.120	.208	.195	.235	.208	.210	.190	.267	.252	.262	.235	.208	.180	.193	.180	.225	.203	.200	.180	.133	.125
155	.150	.147	.200	.195	.230	.200	.210	.200	.265	.240	.260	.235	.210	.185	.230	.225	.235	.210	.205	.185	.145	.130
164	.140	.120	.200	.170	.210	.200	.200	.190	.260	.220	.250	.230	.200	.170	.220	.190	.190	.190	.190	.180	.140	.120
173	.140	.130	.200	.180	.220	.200	.210	.180	.250	.240	.240	.230	.200	.180	.210	.200	.210	.200	.190	.170	.130	.120
182	.140	.140	.200	.180	.220	.200	.220	.180	.250	.230	.250	.230	.200	.180	.220	.160	.230	.200	.200	.180	.140	.120

TABLE B15 (Continued)

TRAFFIC LINES																																													
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18		19		20		21		22	
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15															

TABLE B15 (Continued)
GAGE NO. 1 SHJL TEST ITEM NO. 1 STRAIN IN MICROINCHES

TRAFFIC LINES																								
PASS NUMBER																								
PATTERN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22		
1	29	25	40	36	54	45	81	85	76	67	72	72	84	83	-	55	60	54	46	42	36	21	22	
2	29	29	38	35	54	52	70	86	66	-	84	85	-	-	-	-	-	-	-	-	55	34	-	
3	-	-	-	-	62	50	78	79	80	81	87	-	81	83	77	73	78	85	55	54	55	47	-	
4	-	-	-	-	-	-	-	85	87	61	87	-	85	88	62	58	68	73	47	47	32	33	-	
7	10	10	10	10	14	13	40	40	54	48	48	46	43	42	11	9	9	7	7	7	8	6	-	
10	10	14	13	13	23	17	85	85	55	61	-	51	104	105	20	23	34	38	13	13	24	26	-	
11	25	21	-	25	40	29	127	139	75	85	68	85	145	126	30	24	-	-	23	19	20	22	-	
15	14	15	-	10	13	13	21	73	72	42	45	71	87	146	143	31	32	33	30	26	20	20	-	
18	8	13	11	10	17	12	81	85	42	43	37	41	75	84	16	13	18	16	10	11	11	13	-	
20	13	10	12	12	14	20	30	70	71	35	44	35	36	68	55	14	13	10	11	11	11	11	-	
24	13	10	10	10	8	16	23	82	73	49	44	47	49	83	76	18	16	21	12	10	7	10	-	
25	10	12	11	10	10	13	23	72	74	49	58	49	49	75	78	24	17	26	16	10	10	11	-	
29	-	-	9	8	11	16	14	88	86	52	42	53	59	81	81	13	11	21	13	8	10	13	-	
33	13	10	10	8	8	26	28	76	65	44	39	46	49	80	76	16	8	13	7	7	7	20	-	
35	11	11	7	7	7	23	42	76	69	47	41	48	49	79	70	28	21	21	8	8	8	10	-	
38	7	8	7	5	20	23	73	64	44	39	44	37	73	68	20	29	21	28	8	7	6	5	-	
44	7	7	7	7	16	26	75	62	41	-	62	53	73	66	23	20	20	16	5	7	7	7	-	
50	7	6	5	5	24	13	72	62	43	53	47	36	73	63	25	20	21	26	5	7	8	6	-	
56	6	5	7	7	33	26	65	55	41	31	41	42	67	55	20	16	26	20	8	7	6	8	-	
65	7	5	5	5	26	20	65	55	31	36	42	32	101	83	28	28	23	22	7	7	7	7	-	
74	5	5	6	6	24	16	58	50	36	30	36	30	58	52	24	23	22	16	4	5	6	6	-	
83	-	-	-	-	-	-	-	-	-	-	-	-	65	56	33	24	29	18	7	7	7	5	-	
92	5	5	5	7	26	31	60	49	41	36	42	38	60	54	29	25	26	29	5	5	7	5	-	
101	5	5	5	5	33	29	62	55	44	33	44	34	63	57	29	29	24	21	5	5	5	5	-	
110	7	5	5	5	29	11	62	54	37	31	39	29	60	50	30	27	45	38	5	7	7	3	-	
119	7	7	7	7	24	21	62	49	41	30	41	35	63	50	36	24	26	20	6	8	7	5	-	
128	7	7	7	7	23	20	62	51	40	32	42	33	59	55	26	23	26	26	7	7	7	6	-	
137	7	7	10	10	23	20	65	55	42	37	44	38	65	59	29	29	29	29	7	7	7	7	-	
146	5	7	5	5	20	26	60	53	42	36	39	31	59	55	23	23	29	24	7	7	7	7	-	
155	7	7	7	7	23	23	59	61	46	35	39	36	65	55	26	26	26	26	7	7	7	7	-	
164	5	5	7	7	29	29	62	55	41	33	42	33	65	59	33	29	20	24	7	7	7	5	-	
173	6	6	7	10	29	20	62	52	46	29	41	33	62	52	30	23	28	23	10	10	7	7	-	

TABLE B15 (Continued)

		TRAFFIC LIGHTS																					
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
PATTERN		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
182	5	5	5	5	8	33	29	55	49	55	31	39	33	55	47	26	20	26	33	7	8	5	5
191	7	3	7	7	7	26	23	55	49	42	33	37	31	55	49	27	20	33	33	7	7	5	8
200	5	3	5	5	7	29	29	57	50	36	31	37	31	59	49	26	23	24	26	7	8	7	5
209	5	7	7	7	7	39	36	52	58	33	39	31	41	55	59	26	13	24	23	7	7	5	7
218	7	7	8	8	8	24	26	50	62	34	42	34	42	54	60	20	28	24	20	8	7	5	7
233	7	5	7	8	8	36	23	59	52	39	33	42	33	55	52	29	23	23	16	7	7	7	5
242	5	5	5	7	7	29	33	54	49	39	31	39	33	54	51	23	18	33	33	5	7	7	5
251	5	3	5	5	5	39	30	52	46	42	36	-	-	39	33	-	-	29	28	7	7	5	5
260	6	5	6	6	6	36	36	50	41	42	36	37	34	52	41	37	37	26	37	5	6	5	5
269	6	6	6	8	8	37	42	54	42	42	33	41	36	60	46	42	41	41	36	8	6	5	6
278	6	8	6	5	5	26	29	55	41	39	38	42	31	52	42	26	26	23	29	6	5	6	5
287	7	5	-	-	-	24	28	52	42	38	32	38	33	55	50	24	24	20	21	7	7	5	5
296	-	-	-	-	-	38	38	49	48	45	32	39	32	55	45	24	28	40	40	15	15	5	5
311	5	5	8	7	7	24	29	52	46	36	29	39	29	55	46	23	20	24	28	8	8	7	5

TABLE B15 (Continued)
GAGE NO. 1 SCT TEST ITEM NO. 1 STRAIN IN MICROINCHES

PATTERN	TRAFFIC LINES																					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
2	52	47	40	39	50	49	41	34	30	34	47	47	61	55	60	54	-	-	46	42	50	44
3	44	41	40	42	55	55	56	49	38	36	30	39	54	54	-	57	60	55	40	40	43	45
4	51	48	48	40	55	55	49	50	34	36	38	35	51	52	59	51	55	54	44	41	57	48
5	54	35	50	47	66	61	50	54	36	40	31	44	50	50	56	50	65	60	46	46	56	56
7	56	50	50	45	65	68	50	50	42	35	40	40	57	54	60	57	60	60	50	45	50	55
10	56	50	50	45	60	58	50	53	33	37	-	40	60	54	60	53	-	-	48	45	52	53
13	44	47	45	-	-	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	85	70	83	79	65	90	72	80	67	52	57	42	42	70	65	70	75	78	75	52	125	80
18	82	78	70	75	75	73	65	62	40	40	40	43	55	56	75	69	80	73	68	65	82	75
20	74	76	74	53	56	75	75	55	57	37	41	34	36	53	59	64	62	50	55	52	57	72
24	65	67	67	55	57	65	60	50	54	57	37	38	42	50	60	67	65	68	57	55	62	70
25	64	65	60	55	58	53	70	53	51	39	40	34	37	57	57	64	63	68	60	57	59	67
29	62	73	63	61	60	67	71	53	55	38	40	40	45	53	63	67	60	70	55	60	56	68
33	78	80	75	58	58	74	72	53	53	35	40	35	45	50	57	68	58	68	56	57	57	72
35	76	76	73	58	58	73	68	52	53	35	38	35	42	53	60	73	66	70	55	59	62	75
38	60	60	50	52	67	64	48	47	33	33	31	35	46	43	65	57	63	62	50	52	57	55
44	60	58	50	50	68	64	50	50	30	-	33	35	50	50	68	66	70	63	50	50	60	57
50	51	51	46	44	70	58	45	45	25	30	27	25	43	40	47	61	60	60	39	39	50	50
56	48	42	36	35	62	56	38	35	20	24	23	31	37	40	55	58	65	58	35	40	48	48
65	46	50	35	33	65	63	39	36	21	21	19	20	36	35	65	60	64	59	35	35	50	47
74	50	52	35	35	65	55	35	35	20	20	20	22	35	35	65	60	65	60	35	35	55	45
83	45	43	35	38	63	52	35	35	16	20	20	20	33	33	65	57	63	55	35	37	46	40
92	45	37	31	35	60	56	31	30	18	18	15	17	32	36	63	56	65	55	33	38	43	41
101	40	40	33	36	67	57	33	35	17	20	18	20	35	37	67	57	66	57	33	39	48	39
110	48	42	35	35	64	56	33	30	20	23	20	23	33	37	63	60	60	58	30	38	46	38
119	45	42	33	37	62	53	33	35	16	20	15	21	35	35	62	53	62	55	33	38	40	37
128	52	40	37	35	60	57	30	35	20	20	12	20	37	35	68	58	65	57	37	37	48	48
137	47	45	33	35	57	55	33	37	17	20	15	20	35	35	60	55	63	55	32	32	45	45
146	46	45	30	33	60	67	31	31	15	15	13	15	33	31	65	55	63	56	30	33	48	47
155	47	43	27	32	65	55	35	32	12	15	12	15	35	32	65	57	60	60	30	32	47	45
164	50	45	30	35	65	55	35	35	15	20	15	20	30	35	65	60	65	55	30	35	40	40
173	45	40	30	30	65	55	35	30	15	15	15	20	30	30	65	55	65	55	30	30	40	40
182	40	35	30	35	65	60	30	30	15	15	15	15	30	25	65	55	65	55	30	35	40	40
191	45	40	25	25	65	55	25	25	10	15	15	15	30	25	65	55	65	55	25	25	40	40

Sheet 7 of 30

TABLE B15 (Continued)

TRAFFIC LINES																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
PATTERN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
200	50	40	25	30	65	55	35	30	15	15	15	15	30	30	70	55	65	55	30	30	50	45	
209	44	38	34	31	51	62	30	25	13	16	15	15	28	28	57	58	54	62	33	30	37	45	
218	35	42	33	28	52	60	28	30	16	16	15	13	28	27	53	61	53	51	33	30	36	42	
233	40	35	30	30	60	50	30	25	20	15	15	15	35	35	60	50	65	55	30	30	45	40	
242	35	35	30	30	55	55	20	25	15	10	15	15	30	30	55	50	55	50	25	30	45	40	
251	40	35	25	25	60	50	25	25	10	10	-	-	15	20	60	50	60	50	25	30	40	30	
260	35	30	30	30	55	50	25	25	10	15	10	10	25	25	55	50	60	50	25	25	40	30	
269	45	30	30	35	50	45	25	25	15	10	10	10	30	25	50	45	55	50	25	35	30	30	
278	40	40	25	278	60	50	30	30	15	20	15	15	25	25	55	50	55	50	25	25	35	35	
287	43	42	-	-	60	53	28	28	13	13	13	13	30	30	57	50	60	53	25	30	43	36	
296	-	-	-	-	60	50	25	25	10	10	10	15	30	25	57	55	60	55	60	55	40	35	
311	60	55	50	47	55	48	20	20	13	13	13	10	23	20	58	50	55	47	49	49	32	18	

TABLE B15 (Continued)

PATIENT	TRAFFIC LINES																					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
200	55	50	45	45	55	50	25	25	10	15	10	10	25	25	55	55	55	45	45	50	55	60
209	54	50	48	50	42	55	23	22	10	13	10	12	25	23	47	58	47	56	45	50	47	59
218	50	50	48	50	48	58	22	25	13	13	13	13	23	22	46	57	50	60	48	50	47	60
233	55	45	40	45	55	45	25	25	15	10	15	15	25	25	55	55	60	50	45	50	60	60
242	55	50	55	55	55	45	20	20	15	20	15	10	25	25	55	50	50	45	55	50	55	50
251	55	51	40	45	45	40	20	20	10	10	-	-	10	10	50	45	50	45	45	45	55	50
260	55	45	45	45	45	35	20	20	10	10	10	10	20	15	45	40	50	40	40	45	55	50
269	55	50	45	55	45	35	20	20	10	10	10	10	25	20	40	35	50	40	45	55	55	50
278	50	50	40	45	50	45	20	25	10	15	10	10	25	20	25	45	55	45	40	45	60	50
287	53	45	-	-	54	47	25	23	13	10	13	13	25	25	55	45	54	48	45	45	58	48
296	-	-	-	-	50	40	20	20	10	10	10	10	20	20	55	50	55	45	45	50	60	50
311	GAGE FAILED																					

TABLE B15 (Continued)
GAGE NO. 29PD TEST ITEM NO. 2 DEFLECTION IN INCHES
TRAFFIC LINES

PATTERN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	-	.043	-	.061	-	.080	-	.087	-	.102	-	.090	-	.091	-	.075	-	.080	-	.062	-	.051
3	-	-	-	-	-	.073	-	.092	-	.096	-	.099	-	.093	-	.076	-	.074	-	.062	-	.048
4	-	.031	-	.082	-	.079	-	.087	-	.097	-	.099	-	.089	-	.075	-	.079	-	.064	-	.052
7	-	.019	-	.065	-	.078	-	.089	-	-	-	-	-	.092	-	.076	-	.084	-	.063	-	.049
13	-	.048	-	.044	-	.064	-	.078	-	.088	-	.088	-	.076	-	.066	-	.069	-	.052	-	.043
18	-	.044	-	.061	-	.077	-	.087	-	.096	-	.093	-	.089	-	.074	-	.079	-	.061	-	.049
24	-	.043	-	.034	-	.071	-	.090	-	.098	-	.100	-	.089	-	.078	-	.075	-	.064	-	.051
29	-	.041	-	.054	-	.075	-	.085	-	.088	-	.093	-	.091	-	.079	-	.076	-	.061	-	.051
33	-	.046	-	.059	-	.071	-	.089	-	.103	-	.103	-	.088	-	.079	-	.072	-	.062	-	.047
39	.049	.071	.061	.061	.077	.072	.087	.085	.095	.095	.094	.094	.085	.085	.075	.070	.072	.070	.064	.059	.049	.046
45	.043	.071	.063	.061	.073	.072	.087	.085	.096	.094	.094	.094	.086	.085	.076	.074	.074	.075	.062	.060	.050	.050
51	.045	.071	.065	.064	.072	.072	.086	.085	.096	.097	.095	.096	.088	.088	.075	.073	.073	.076	.049	.049	.050	.048
57	.049	.075	.060	.056	.072	.072	.082	.081	.092	.096	.093	.093	.083	.083	.073	.073	.073	.072	.059	.059	.047	.047
66	.047	.047	.060	.064	.077	.074	.093	.085	.094	.096	.095	.096	.085	.086	.077	.076	.074	.076	.061	.062	.046	.044
75	.055	.075	.072	.070	.084	.086	.090	.092	.104	.104	.104	.106	.090	.092	.088	.082	.088	.088	.064	.064	.052	.058
84	.068	.071	.088	.090	.102	.102	.108	.102	.116	.112	.112	.112	.102	.100	.094	.094	.094	.096	.082	.078	.062	.062
93	.060	.071	.072	.072	.092	.092	.096	.096	.107	.104	.106	.106	.096	.097	.087	.087	.086	.090	.072	.071	.059	.055
102	.059	.071	.077	.074	.090	.090	.097	.091	.107	.104	.105	.105	.096	.089	.087	.087	.088	.084	.072	.069	.059	.059
111	.059	.071	.077	.070	.091	.091	.096	.095	.105	.102	.104	.101	.093	.099	.085	.085	.086	.084	.073	.076	.059	.056
120	.053	.071	.077	.068	.084	.084	.088	.084	.097	.096	.099	.096	.085	.082	.083	.078	.083	.078	.065	.065	.040	.050
129	.054	.071	.077	.077	.089	.088	.092	.090	.108	.100	.103	.100	.089	.083	.098	.084	.086	.085	.070	.068	.054	.050
138	.065	.071	.086	.092	.106	.104	.110	.106	.128	.126	.132	.128	.120	.112	.108	.108	.112	.108	.086	.086	.066	.062
147	.060	.071	.080	.073	.096	.092	.100	.096	.114	.112	.112	.113	.100	.093	.093	.092	.095	.091	.080	.081	.060	.058
156	.060	.071	.080	.072	.092	.088	.100	.092	.110	.100	.108	.108	.104	.104	.088	.088	.088	.084	.072	.068	.056	.052
165	.060	.071	.080	.072	.092	.088	.100	.096	.108	.100	.108	.108	.104	.104	.088	.088	.088	.084	.072	.068	.056	.052
174	.060	.071	.080	.076	.100	.096	.100	.096	.124	.124	.124	.124	.140	.120	.100	.100	.100	.100	.084	.084	.060	.060
183	.048	.071	.080	.068	.088	.088	.092	.088	.104	.106	.104	.106	.092	-	.084	.084	.088	.084	.068	.064	.052	.052
192	.056	.071	.076	.064	.084	.076	.092	.088	.104	.100	.100	.100	.096	.100	.084	.084	.084	.076	.064	.064	.052	.048
201	.060	.071	.076	-	.096	.096	.100	-	.116	.112	.112	.112	.092	-	.092	.092	.092	.092	.072	.072	.060	.056
210	.052	.071	.070	.065	.084	.084	.092	.086	.103	.102	.102	.102	.091	.085	.084	.083	.084	.084	.068	.065	.052	.050
219	.046	.071	.060	.056	.072	.051	.082	.093	.092	.092	.092	.092	.084	.080	.072	.070	.072	.071	.060	.058	.044	.045
234	.056	.071	.072	.072	.092	.088	.096	.096	.108	.112	.108	.108	.092	.092	.088	.084	.088	.084	.072	.068	.056	.052

Sheet 11 of 30

TABLE B15 (Continued)

TRAFFIC LINES																							
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
		PASS NUMBER																					
PATTERN		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
243	.048	.040	.060	.052	.052	.052	.052	.090	.080	.092	.096	.096	.092	.076	.080	.072	.072	.072	.068	.056	.056	.044	.040
252	.090	.084	.120	.108	.136	.128	.144	.144	.132	.160	.132	.160	.156	.140	.140	.132	.128	.132	.128	.112	.104	.084	.076
261	.100	.080	.120	.120	.140	.132	.148	.144	.144	.168	.168	.164	.164	.148	.152	.140	.136	-	-	.120	.124	.112	.096
270	.072	.064	.096	.092	.112	.112	.128	.128	.124	.140	.140	.140	.140	.132	.128	.116	.112	.112	.108	.116	.112	.116	.112
279	.100	.096	.132	.120	.148	.144	.160	.160	.164	.176	.172	.172	.168	.160	.156	.148	.144	.152	.148	.128	.120	.104	.096
282	.102	.096	.134	.126	.150	.148	.160	.160	.158	.176	.164	.180	.178	.164	.156	.152	.148	.150	.142	.128	.122	.102	.096
283	.099	.094	.121	.112	.143	.137	.149	.149	.143	.166	.165	.166	.164	.150	.141	.142	.138	.142	.138	.120	.116	.096	.094
297	.090	.090	.114	.116	.136	.136	.142	.142	.142	.160	.156	.160	.164	.120	.132	.134	.130	-	-	.132	.130	.092	.104
312	.086	.034	-	.102	.127	.123	.132	.132	.132	.148	.148	.147	.148	.132	.128	.124	.120	.124	.120	.104	.098	.087	.076

TABLE B15 (Continued)
GAGE NO. 2888JL TEST ITEM NO. 2 STRAIN IN MICROINCHES

TRAFFIC LINES																							
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
		PASS NUMBER																					
PATTERN		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
18	25	-	-	38	-	63	-	42	-	55	-	44	-	53	-	49	-	51	-	36	-	25	-
24	27	-	-	33	-	54	-	50	-	55	-	74	-	55	-	70	-	57	-	37	-	32	-
29	25	-	-	34	-	50	-	53	-	55	-	60	-	60	-	53	-	55	-	36	-	30	-
33	37	-	-	49	-	42	-	50	-	45	-	53	-	48	-	65	-	50	-	46	-	48	-
66	60	60	60	89	80	108	98	82	82	115	102	-	-	-	-	-	-	-	-	-	-	-	-
75	83	82	101	101	95	123	116	105	106	122	123	121	117	98	108	118	107	118	112	107	118	113	108
84	-	-	-	-	101	105	-	-	-	-	-	-	95	79	70	118	104	110	100	-	-	-	65
91	81	86	100	115	99	95	128	92	92	105	99	105	98	80	80	100	100	100	100	72	69	53	85
111	64	70	86	90	118	110	83	77	77	112	108	110	98	95	88	100	100	106	90	72	82	67	70
120	83	65	88	85	-	-	85	85	85	122	-	-	100	-	88	122	-	-	-	-	-	50	68
129	110	106	125	109	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
138	195	155	200	195	170	185	197	200	200	247	245	223	213	190	186	212	190	190	180	165	160	135	138
147	89	90	123	110	220	180	142	127	127	160	-	225	-	170	155	190	220	165	190	132	120	100	95
156	105	110	120	120	145	140	140	140	140	160	150	150	150	150	120	145	135	140	140	135	135	100	95
165	100	95	120	110	145	120	120	125	125	155	155	145	155	130	125	135	140	125	125	105	110	95	90
174	105	100	105	115	180	135	125	125	125	145	140	160	150	130	130	150	135	140	135	115	115	105	100
192	110	95	115	125	175	160	150	165	165	185	205	185	190	180	180	180	145	150	180	115	135	130	105
201	95	85	105	-	120	110	100	-	-	130	130	130	130	-	90	120	120	120	115	90	90	80	80
210	70	75	80	80	110	118	100	100	100	110	112	113	106	100	94	120	105	120	112	89	85	74	70
219	59	70	77	89	108	115	77	80	80	100	116	111	115	97	63	101	130	89	136	93	116	68	83
234	100	100	110	105	135	135	110	115	115	140	135	145	130	120	120	120	125	125	115	110	105	90	90
243	70	60	75	85	100	95	90	80	80	100	105	100	100	85	75	95	105	95	105	80	95	65	55
252	75	70	90	85	100	105	90	80	80	120	125	115	120	90	95	100	95	100	110	80	85	60	70
261	100	95	115	110	130	115	100	115	115	135	130	135	135	125	130	130	120	100	110	-	-	90	95
270	65	55	80	80	95	105	90	85	85	100	105	135	125	125	100	105	95	85	85	60	80	65	60
279	115	120	140	130	155	130	145	155	155	160	160	140	135	125	115	120	115	85	65	40	40	30	30
282	30	30	40	42	80	64	40	48	48	66	63	80	75	40	38	80	72	70	50	40	45	32	35
288	28	32	32	42	69	69	35	32	32	74	70	70	69	42	37	69	70	79	70	35	37	27	28
297	30	30	33	38	65	65	33	35	35	50	55	50	72	40	35	65	65	60	70	32	35	30	20
312	25	23	32	33	50	65	34	32	32	48	55	47	60	30	30	52	55	60	60	30	30	27	22

Sheet 13 of 30

TABLE B15 (Continued)
GAGE NO. 2 SCL TEST ITEM NO. 2 STRAIN IN MICROINCHES

		TRAFFIC LINES																					
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
PATTERN		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
3	-	81	-	-	75	-	53	-	43	-	33	-	32	-	38	-	61	-	54	-	75	-	81
4	-	78	-	-	59	-	48	-	32	-	27	-	23	-	33	-	53	-	51	-	70	-	71
7	-	75	-	-	65	-	47	-	31	-	25	-	24	-	33	-	54	-	50	-	64	-	75
13	-	71	-	-	83	-	60	-	44	-	31	-	26	-	45	-	64	-	52	-	60	-	71
18	-	74	-	-	61	-	48	-	32	-	26	-	27	-	32	-	42	-	48	-	68	-	74
24	-	74	-	-	66	-	53	-	32	-	27	-	24	-	32	-	40	-	45	-	67	-	74
29	-	85	-	-	64	-	53	-	37	-	28	-	27	-	28	-	48	-	53	-	64	-	74
33	-	76	-	-	74	-	53	-	34	-	31	-	30	-	31	-	45	-	51	-	77	-	74
39	78	74	68	-	64	50	48	35	35	26	26	27	27	35	35	52	52	52	55	66	61	79	72
45	75	72	71	50	72	50	49	36	37	27	27	26	27	35	35	52	49	52	48	69	68	79	72
51	120	65	59	-	-	-	42	30	37	32	35	30	35	32	32	48	48	48	42	85	69	74	74
57	77	69	56	64	57	48	48	35	36	27	26	31	31	35	36	45	48	52	48	63	58	74	73
66	72	66	64	64	64	48	48	42	32	36	32	29	35	35	37	53	42	53	42	63	63	78	76
75	73	69	61	68	53	48	48	40	39	37	37	37	35	40	40	53	50	51	48	61	61	74	77
84	77	69	68	63	50	48	48	37	35	27	29	28	30	37	35	52	52	53	43	68	58	77	75
93	80	77	78	-	59	52	53	37	35	27	26	27	27	37	35	52	53	52	50	71	69	82	79
102	-	-	-	-	48	48	48	36	28	27	29	29	29	135	35	53	45	57	48	74	69	78	73
111	69	64	54	54	63	48	52	35	36	27	27	28	31	36	36	51	45	45	47	69	64	72	64
120	84	75	69	69	66	53	48	37	36	27	26	28	27	35	32	53	52	54	47	72	61	81	74
129	74	69	69	64	64	48	45	35	43	26	28	29	30	35	35	40	40	53	48	67	69	72	68
138	61	67	64	64	59	48	43	45	45	40	42	42	40	45	45	50	50	50	50	58	58	66	66
147	77	74	61	61	50	49	48	36	36	32	28	27	31	35	37	51	47	53	53	74	74	82	76
156	-	74	74	74	74	48	48	37	37	35	32	32	35	35	32	37	37	42	48	61	64	80	70
165	80	77	80	77	50	45	45	40	42	42	35	37	32	37	37	48	53	50	53	80	80	74	74
174	74	69	64	69	53	53	56	48	48	42	42	42	42	48	48	53	53	53	53	69	66	69	74
183	85	80	74	69	48	48	42	32	37	37	37	37	37	42	-	48	48	48	48	69	69	74	80
192	77	81	73	74	50	52	52	38	35	29	29	35	35	32	32	50	50	54	52	74	74	78	78
201	74	74	66	-	53	53	42	32	-	40	37	37	40	-	37	48	50	53	48	64	69	74	74
210	80	79	78	74	52	52	52	39	37	37	36	33	33	37	37	53	53	50	54	74	74	77	77
219	78	69	61	64	51	48	48	32	36	29	28	29	26	35	37	53	53	51	52	64	63	80	70
234	72	72	64	64	53	45	45	32	37	40	40	37	40	42	37	50	48	48	48	64	69	74	74
243	80	74	69	69	53	53	53	35	35	27	27	27	32	35	35	50	50	50	45	72	69	77	74

TABLE B15 (Continued)

PATTERN	TRAFFIC LINES																					
	1	2	3	4	5	6	7	8	9	PASS NUMBER												
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
252	74	69	48	48	48	48	32	35	37	35	37	35	40	37	48	45	53	53	69	64	77	72
261	72	64	53	50	53	50	48	45	40	42	42	40	55	40	53	48	-	69	56	74	74	72
270	90	77	69	56	48	37	32	32	32	35	35	35	37	37	53	42	45	48	74	72	80	76
279	72	61	64	48	50	48	50	48	48	45	48	45	50	50	58	53	53	48	64	64	69	69
282	63	62	57	60	41	41	37	36	36	21	24	24	31	31	44	42	41	34	60	63	63	67
293	61	50	53	48	42	42	31	30	29	27	27	25	35	29	45	42	45	42	56	54	61	64
297	65	52	55	42	37	31	31	26	26	21	25	21	31	26	43	34	-	-	42	39	67	58
312	63	100	61	56	40	35	32	24	27	21	27	21	27	27	42	35	40	37	58	58	66	63

TABLE B15 (Continued)
CAGE NO. 25CT TEST ITEM NO. 2 STRAIN IN MICROINCHES
TRAFFIC LINES

PATTERN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
3	-	70	-	-	-	-	-	13	-	25	-	26	-	15	-	-	-	-	-	36	-	68
4	-	73	-	-	-	-	-	11	-	25	-	24	-	19	-	-	-	-	-	33	-	75
7	-	76	-	-	-	-	-	21	-	31	-	32	-	20	-	-	-	2	-	42	-	72
13	-	50	-	-	-	-	-	14	-	23	-	30	-	6	-	-	-	10	-	46	-	68
18	-	70	-	-	-	-	-	16	-	26	-	27	-	21	-	-	-	8	-	50	-	75
24	-	76	-	-	-	-	-	19	-	26	-	28	-	23	-	-	-	13	-	36	-	-
29	-	82	-	-	-	-	-	15	-	26	-	26	-	24	-	-	-	13	-	5	-	99
33	-	70	-	-	-	-	-	22	-	31	-	33	-	23	-	-	-	8	-	31	-	78
39	83	94	42	36	10	8	16	16	26	26	26	24	18	18	5	10	8	16	42	44	85	88
45	80	85	39	42	5	7	18	17	26	26	26	26	18	18	8	10	8	8	44	33	82	91
51	73	85	34	36	8	8	21	21	29	27	28	28	21	20	7	7	7	7	77	83	76	78
57	30	79	36	50	8	10	20	19	31	31	32	30	19	17	8	10	8	8	58	36	75	88
66	71	83	31	23	10	11	19	19	31	28	31	29	20	21	8	8	8	10	32	29	81	83
75	70	73	31	23	16	16	23	23	36	34	36	23	23	23	13	13	10	13	31	36	75	78
84	93	90	33	33	9	7	21	18	29	26	30	26	19	21	8	8	7	8	32	33	77	87
93	86	80	45	42	8	8	19	19	27	27	27	28	16	16	8	8	8	8	36	39	83	83
102	85	86	29	31	10	13	21	19	33	29	31	29	24	18	13	15	10	11	31	42	80	82
111	85	91	34	32	13	10	24	20	34	31	34	34	30	21	10	13	11	13	34	31	83	91
120	85	92	42	52	10	13	23	21	34	31	34	31	21	21	14	10	11	10	44	49	80	82
129	75	105	39	26	13	13	26	26	29	29	36	29	24	18	14	13	13	16	33	44	75	81
138	75	75	30	23	23	26	29	29	44	44	44	42	34	29	26	26	23	23	26	31	62	57
147	80	91	32	34	12	16	26	24	44	37	36	34	29	25	16	16	16	16	34	21	-	94
156	-	33	31	44	18	18	21	21	36	34	36	36	36	39	26	26	16	16	36	39	75	60
165	68	73	28	47	18	26	26	26	36	39	39	39	29	26	18	16	16	16	36	44	62	65
174	52	65	31	52	26	23	31	29	44	44	47	44	34	34	23	26	23	23	34	21	69	74
183	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
192	91	80	31	26	16	13	26	21	37	31	34	32	36	32	21	23	13	13	34	44	88	94
201	62	91	62	-	26	21	29	-	42	42	42	39	-	18	21	23	21	21	42	44	78	83
210	78	107	44	52	16	16	26	23	36	34	39	31	26	21	16	13	16	13	44	65	91	73
219	80	63	39	36	10	8	21	18	34	31	29	30	23	18	8	16	16	8	34	33	73	130
234	60	83	31	23	23	23	31	29	42	42	44	42	34	31	23	23	21	21	31	26	65	68
243	122	81	52	47	16	13	26	21	34	31	36	31	26	16	16	13	16	13	39	42	109	73

CAGE NOT OPERATING

TABLE B15 (Continued)

TRAFFIC LINES																							
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
		PASS NUMBER																					
PATTERN		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
252	78	29	34	18	18	36	36	23	23	42	36	36	36	23	23	21	18	21	16	33	29	70	75
261	114	26	13	23	23	42	42	29	34	40	42	42	42	34	34	21	21	-	-	31	16	68	107
270	78	47	36	13	10	31	31	26	34	34	31	36	31	26	26	16	13	13	10	42	57	78	81
279	60	31	47	26	26	31	34	34	44	44	42	44	42	34	31	26	23	39	29	29	49	81	70
282	40	18	15	15	15	26	26	26	40	39	40	37	29	29	28	21	21	21	35	35	36	42	55
288	57	21	16	23	23	31	26	31	26	47	39	44	39	34	29	26	23	26	23	23	21	34	49
297	73	24	26	21	16	31	29	31	29	62	42	45	44	31	26	21	25	-	-	25	20	26	31
312	64	26	26	23	23	29	29	29	29	47	44	47	44	34	31	21	21	21	23	44	39	107	70

TABLE B15 (Continued)

TRAFFIC LINES																				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
100	-	95	-	103	-	100	-	34	-	84	-	85	-	74	-	63	-	63	-	71
100	-	83	-	90	-	103	-	84	-	80	-	93	-	120	-	100	-	84	-	90
106	-	85	-	85	-	106	-	85	-	85	-	95	-	125	-	100	-	89	-	85
106	-	83	-	96	-	105	-	85	-	130	-	95	-	122	-	105	-	100	-	120
91	93	73	77	88	95	95	122	75	80	77	77	89	97	90	90	90	87	76	75	94
100	80	82	89	104	97	126	80	79	76	76	79	95	69	90	104	100	118	80	81	87
100	80	72	79	89	95	96	68	71	70	70	70	91	90	84	91	88	99	88	102	89
57	90	100	77	78	89	92	102	80	73	74	73	100	89	92	98	91	90	71	78	88
100	82	81	94	120	100	100	93	74	80	75	80	100	95	88	95	100	122	100	102	104
89	74	67	69	78	101	74	64	54	62	57	53	80	61	76	103	88	102	75	76	106
87	80	69	68	82	84	30	83	63	62	62	70	89	82	81	79	79	115	71	71	98
91	80	85	72	68	86	80	70	70	65	70	69	81	81	80	35	82	99	69	63	91
102	80	70	64	68	86	80	74	60	66	55	62	75	80	84	96	77	80	67	62	81
111	85	71	60	61	80	73	65	60	54	52	52	70	69	79	90	80	112	66	64	86
120	80	75	65	65	95	84	68	70	53	55	52	68	68	79	85	78	88	63	62	83
129	84	69	57	64	73	93	100	64	49	48	50	64	69	76	73	69	74	58	59	80
133	75	70	55	60	92	96	57	48	45	42	42	40	48	67	70	80	90	55	55	76
147	78	70	65	57	95	80	75	45	67	50	55	62	82	77	118	72	77	60	61	80
156	80	60	60	60	75	85	80	50	50	50	50	50	50	70	70	70	70	55	80	75
165	75	70	55	50	60	100	70	60	40	40	45	70	50	70	70	60	70	50	50	80
174	65	70	45	50	50	80	75	45	35	45	40	60	60	55	70	60	65	50	50	60
192	75	80	60	55	90	70	70	50	50	45	50	45	55	80	60	95	90	60	55	75
201	80	65	50	-	70	70	65	-	35	35	40	-	90	70	70	65	80	60	50	80
210	82	75	65	59	74	75	83	83	47	48	49	55	83	90	96	74	83	74	66	80
219	85	82	63	60	79	70	95	110	52	58	59	59	89	110	74	72	78	77	63	89
234	80	70	55	55	75	65	65	60	45	40	40	45	70	60	70	70	70	55	55	70
243	70	75	55	55	65	70	75	75	45	50	45	45	75	100	70	70	90	60	60	75
252	80	70	55	50	65	85	75	75	40	50	40	40	70	95	85	65	70	55	55	80
261	65	65	55	45	95	90	60	55	40	40	40	45	60	55	60	55	50	-	-	75
270	75	80	65	60	75	95	75	70	45	55	50	75	70	85	110	110	100	60	60	80
279	80	65	60	65	70	90	65	40	45	45	40	60	55	75	70	65	90	85	60	70
282	81	85	62	65	80	73	92	53	62	55	50	82	85	75	102	102	123	62	60	75
283	74	85	63	60	74	73	90	87	60	54	53	83	85	75	73	75	80	62	63	83
297	90	82	75	65	90	118	105	80	79	75	60	102	90	90	96	90	95	80	70	95
312	95	100	90	80	100	120	117	100	80	75	77	115	100	100	100	95	90	85	80	100

TABLE B15 (Continued)
GAGE NO. 2DSJL TEST ITEM NO. 2 DEFLECTION IN INCHES

PATTERN	PASS NUMBER																					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	.044	.036	.049	.047	.059	.054	.068	.062	.074	.072	.075	.073	.072	.066	.067	.057	.060	.038	.050	.044	.041	.040
3	-	-	-	-	.065	.053	.075	.066	.077	.074	.076	.073	.072	.069	.062	.058	.058	.059	.053	.048	.045	.041
4	.043	.041	.048	.046	.057	.056	.068	.063	.071	.068	.073	.068	.063	.059	.059	.055	.056	.057	.046	.048	.042	.040
7	.042	.038	.050	.050	.060	.056	.057	.066	.074	.073	.076	.074	.068	.066	.061	.058	.059	.056	.051	.048	.043	.040
13	.048	.039	.035	.031	.054	.046	.060	.051	.068	.062	.072	.064	.060	.052	.048	.049	.047	.042	.042	.040	.034	.034
18	.037	.034	.046	.044	.055	.052	.061	.058	.066	.066	.069	.064	.063	.060	.055	.054	.053	.050	.044	.043	.039	.034
24	.036	.040	.042	.048	.052	.058	.060	.064	.074	.068	.070	.072	.064	.068	.058	.059	.056	.059	.045	.051	.038	.041
29	.036	.042	.041	.050	.052	.054	.060	.062	.064	.063	.069	.066	.066	.066	.054	.058	.052	.058	.044	.048	.039	.041
33	.051	.044	.060	.056	.071	.062	.081	.078	.085	.085	.037	.089	.078	.080	.069	.070	.068	.082	.057	.055	.047	.044
39	.042	.042	.050	.050	.060	.060	.068	.065	.072	.072	.071	.072	.064	.064	.058	.056	.059	.056	.050	.048	.041	.038
45	.040	.038	.050	.048	.058	.058	.066	.064	.072	.072	.073	.070	.066	.064	.058	.058	.058	.058	.048	.048	.041	.041
51	.044	.044	.056	.051	.062	.061	.070	.070	.078	.076	.080	.079	.070	.064	.064	.061	.065	.065	.045	.043	.046	.046
57	.047	.042	.053	.052	.065	.064	.068	.068	.075	.076	.075	.072	.064	.064	.057	.058	.060	.059	.051	.052	.044	.041
66	.051	.052	.060	.058	.070	.069	.073	.070	.083	.083	.080	.078	.069	.067	.069	.065	.066	.066	.057	.057	.046	.044
75	.056	.060	.068	.068	.082	.080	.080	.080	.096	.090	.092	.088	.080	.080	.080	.080	.080	.080	.068	.066	.057	.058
84	.076	.074	.092	.090	.104	.100	.105	.106	.120	.116	.120	.120	.106	.105	.103	.102	.100	.102	.100	.084	.057	.051
93	.072	.064	.084	.080	.096	.092	.100	.100	.110	.110	.110	.108	.107	.104	.100	.094	.094	.093	.080	.080	.080	-
102	.076	.079	.093	.089	.104	.102	.107	.100	.116	.116	.116	.115	.105	.103	.103	.102	.100	.102	.085	.084	.057	.051
111	.075	.075	.092	.086	.104	.101	.110	.100	.119	.114	.116	.113	.104	.100	.097	.096	.096	.092	.084	.086	.071	.072
120	.068	.060	.083	.079	.096	.092	.100	.095	.112	.109	.112	.106	.100	.099	.097	.096	.093	.096	.091	.076	.066	.060
129	.070	.071	.088	.090	.104	.100	.104	.099	.120	.114	.120	.118	.100	.096	.100	.098	.101	.098	.090	.080	.071	.064
138	.108	.112	.132	.140	.150	.148	.148	.152	.176	.168	.176	.172	.160	.156	.156	.152	.156	.156	.136	.130	.110	.108
147	.090	.090	.103	.102	.124	.125	.130	.122	.143	.140	.145	.145	.130	.124	.125	.126	.125	.124	.110	.110	.090	.080
156	-	.080	.090	.090	.110	.110	.110	.110	.120	.120	.130	.120	.130	.120	.120	.110	.110	.110	.100	.090	.080	.070
165	.083	.083	.105	.103	.117	.120	.120	.120	.145	.140	.140	.139	.132	.120	.125	.125	.125	.125	.105	.105	.082	.082
174	.090	.090	.120	.120	.130	.130	.130	.130	.160	.150	.160	.150	.140	.130	.140	.140	.140	.140	.120	.120	.090	.090
183	.090	.080	.100	.090	.110	.100	.110	.110	.130	.120	.120	.120	.110	.110	.130	.110	.100	.100	.090	.080	.080	.080
192	.076	.065	.097	.094	.110	.101	.111	.107	.128	.121	.128	.120	.121	.121	-	.130	.110	.108	.097	.091	.078	.078
201	.090	.090	.100	-	.120	.120	.120	.120	.140	.140	.140	.140	-	.130	.130	.120	.130	.120	.110	.110	.090	.090
210	.077	.078	.097	.091	.110	.104	.110	.104	.121	.120	.125	.120	.110	.104	.105	.105	.105	.105	.090	.085	.081	.076
219	.071	.060	.090	.082	.200	.098	.110	.100	.120	.110	.118	.110	.105	.098	.100	.096	.104	.100	.090	.088	.072	.073
234	.090	.090	.120	.110	.130	.120	.130	.120	.140	.140	.140	.140	.130	.120	.130	.130	.130	.130	.110	.110	.110	.090

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TABLE B15 (Continued)

		TRAFFIC LINES																					
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
PATTERN		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
243	.080	.060	.090	.080	.090	.100	.090	.100	.090	.110	.110	.110	.120	.100	.090	.100	.100	.100	.100	.090	.080	.070	.070
252	.080	.080	.100	.070	.110	.120	.110	.120	.110	.130	.120	.130	.130	.110	.110	.110	.110	.110	.110	.110	.080	.080	.080
261	.100	.100	.120	.110	.130	.130	.130	.130	.120	.140	.140	.140	.140	.130	.130	.130	.130	-	-	.110	.120	.090	.090
270	.070	.070	.100	.080	.100	.100	.100	.100	.100	.110	.110	.110	.110	.110	.100	.100	.100	.100	.100	.100	.080	.080	.070
279	.090	.100	.120	.120	.140	.140	.140	.140	.140	.150	.150	.160	.150	.140	.140	.140	.130	.130	.130	.130	.130	.110	.100
282	.090	.090	.120	.120	.140	.130	.130	.140	.130	.150	.150	.150	.150	.130	.130	.130	.130	.130	.130	.120	.110	.090	.090
288	.105	.100	.115	.120	.135	.140	.135	.140	.130	.150	.145	.150	.145	.135	.130	.130	.135	.135	.135	.120	.114	.094	.100
297	.080	.070	.100	.100	.120	.115	.120	.115	.120	.130	.120	.130	.130	.120	.110	.120	.120	-	-	.120	.120	.110	.090
312	.085	.085	.111	.106	.125	.121	.120	.122	.122	.142	.135	.140	.137	.125	.125	.125	.125	.125	.125	.110	.108	.090	.080

TABLE B15 (Continued)
GAGE NO. 2DC TEST ITEM NO. 2 DEFLECTION IN INCHES

PATTERN	TRAFFIC LINES																					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
111	.045	.044	.041	.041	.036	.034	.031	.027	.026	.022	.025	.022	.031	.027	.036	.033	.036	.034	.042	.038	.045	.043
120	.050	.045	.040	.040	.032	.032	.029	.023	.023	.020	.023	.020	.029	.023	.036	.033	.036	.032	.043	.040	.043	.043
129	.043	.043	.041	.041	.034	.034	.031	.027	.026	.022	.023	.020	.029	.023	.035	.032	.032	.031	.040	.038	.041	.044
138	.050	.050	.046	.040	.036	.032	.032	.025	.025	.025	.029	.022	.029	.029	.036	.036	.040	.036	.043	.043	.050	.050
147	.054	.052	.050	.047	.043	.040	.036	.032	.032	.027	.029	.029	.036	.032	.043	.041	.043	.040	.050	.047	.054	.054
156	.050	.050	.050	.050	.043	.036	.036	.029	.029	.022	.029	.022	.029	.022	.043	.036	.043	.036	.050	.043	.050	.050
165	.050	.050	.050	.050	.043	.036	.036	.036	.029	.029	.029	.029	.036	.036	.043	.040	.040	.040	.050	.047	.054	.050
174	.050	.050	.050	.050	.043	.043	.036	.036	.032	.029	.029	.025	.036	.032	.043	.040	.043	.040	.047	.050	.054	.050
183	.054	.054	.050	.050	.043	.036	.036	.029	.025	.025	.025	.029	.036	.032	.043	.040	.043	.040	.047	.050	.054	.050
192	.058	.056	.050	.050	.043	.043	.036	.036	.036	.029	.036	.029	.036	.032	.043	.040	.043	.040	.047	.050	.054	.050
201	.054	.050	.050	.050	.043	.040	.036	.036	.029	.025	.029	.025	.036	.029	.043	.036	.043	.040	.050	.050	.056	.050
210	.058	.056	.054	.052	.048	.044	.038	.036	.036	.028	.032	.028	.040	.038	.050	.044	.048	.044	.052	.050	.058	.056
219	.058	.053	.051	.043	.043	.043	.039	.031	.029	.027	.028	.026	.035	.035	.045	.047	.043	.039	.049	.049	.056	.051
234	.050	.054	.047	.043	.043	.036	.032	.029	.029	.025	.029	.022	.032	.028	.040	.036	.043	.036	.047	.043	.050	.047
243	.043	.043	.043	.040	.036	.032	.029	.025	.025	.022	.025	.022	.029	.025	.036	.032	.032	.032	.040	.040	.043	.043
252	.043	.043	.040	.040	.036	.032	.029	.025	.025	.018	.025	.018	.019	.025	.032	.029	.032	.032	.040	.036	.043	.040
261	.043	.043	.040	.036	.032	.032	.032	.029	.025	.022	.025	.018	.029	.025	.032	.029	.032	.028	.040	.040	.040	.040
270	.047	.043	.043	.040	.036	.032	.032	.025	.022	.018	.025	.022	.029	.025	.032	.029	.032	.029	.040	.040	.040	.040
279	.043	.043	.040	.040	.036	.032	.029	.025	.022	.018	.025	.022	.029	.025	.032	.029	.032	.028	.040	.040	.043	.043
282	.027	.026	.025	.023	.022	.020	.018	.016	.015	.013	.015	.014	.017	.016	.020	.019	.021	.018	.025	.023	.027	.026
298	.027	.025	.024	.022	.022	.020	.018	.016	.014	.013	.014	.013	.017	.016	.021	.020	.021	.020	.025	.023	.027	.027
297	.026	.024	.025	.022	.020	.018	.018	.016	.015	.012	.014	.012	.018	.016	.021	.020	.020	.018	.020	.018	.024	.023
312	.028	.024	.023	.022	.020	.019	.017	.015	.018	.014	.015	.013	.018	.016	.021	.019	.022	.020	.025	.025	.026	.025

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TABLE B15 (Continued)
GAGE NO. 2 SNJL TEST ITEM NO. 2 STRAIN IN MICROINCHES

TRAFFIC LINES																							
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22		
PASS NUMBER																							
PATTERN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
1	-	119	-	113	-	72	-	62	-	90	-	86	-	65	-	56	-	-	-	62	-	33	
3	-	-	-	-	-	-	-	68	-	58	-	53	-	94	-	49	-	50	-	48	-	40	
7	-	16	-	14	-	21	-	48	-	29	-	53	-	72	-	21	-	21	-	17	-	13	
13	-	24	-	18	-	52	-	85	-	80	-	75	-	66	-	50	-	62	-	39	-	37	
18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	41	-	29	-	25	
24	-	27	-	31	-	37	-	62	-	56	-	57	-	60	-	43	-	42	-	33	-	25	
29	-	-	-	25	-	36	-	62	-	57	-	57	-	58	-	41	-	43	-	30	-	18	
33	-	31	-	23	-	50	-	60	-	65	-	57	-	54	-	46	-	41	-	48	-	45	
39	19	21	25	28	37	39	66	61	56	62	57	57	66	66	40	38	37	37	28	27	19	20	
45	20	21	27	27	40	36	62	70	53	58	55	54	61	60	37	42	36	41	25	27	20	21	
51	35	29	41	35	53	45	74	66	68	62	68	61	71	68	68	45	51	43	33	31	32	28	
57	30	20	40	25	38	37	73	72	56	57	60	57	75	68	33	33	35	29	34	26	23	20	
66	15	16	20	20	27	29	68	69	45	42	48	45	58	66	27	29	27	33	21	21	12	16	
75	14	18	10	10	16	34	74	68	47	49	49	47	74	68	16	22	16	28	16	16	14	14	
84	19	14	21	14	35	23	76	71	49	49	54	48	74	70	33	21	29	35	21	14	19	12	
93	20	17	21	17	33	27	70	75	51	52	51	60	76	75	33	26	32	27	21	17	19	17	
102	19	16	19	15	31	23	74	74	47	47	49	55	74	78	29	27	33	29	19	15	18	18	
111	16	15	16	11	29	22	73	76	47	55	48	49	72	72	31	24	31	42	16	16	16	16	
120	19	16	23	17	34	28	74	68	47	47	45	47	74	73	33	26	31	33	21	19	20	19	
129	25	23	25	23	35	35	78	74	33	57	53	60	75	72	30	22	30	30	23	25	27	21	
138	21	19	16	16	62	51	76	73	55	51	51	53	73	73	21	28	22	37	18	16	16	16	
147	16	16	19	15	31	25	74	72	50	62	52	47	72	70	25	48	25	25	21	15	19	17	
156	-	18	18	14	23	27	74	78	49	49	49	47	51	54	74	76	25	23	16	16	16	16	
165	18	18	18	16	23	45	82	82	53	49	53	57	74	78	27	27	25	18	16	16	21	21	
174	16	16	16	18	25	12	74	78	51	49	53	53	76	74	16	41	16	25	16	12	15	14	
183	GAGE FAILED																						

TABLE B15 (Continued)
GAGE NO. 33 PD TEST ITEM NO. 3 DEFLECTION IN INCHES

TRAFFIC LINES																								
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
		PASS NUMBER																						
PATTERN		.010	.009	.012	.011	.013	.015	.013	.013	.016	-	.016	.018	.018	.016	.016	.015	.016	.012	.012	.010	.011	.008	.007
5		.009	.006	.011	.012	.012	.014	.016	.016	.018	.016	.018	.017	.018	.016	.017	.019	.015	.016	.012	.014	.011	.013	.008
15		.007	.005	.011	.012	.014	-	.016	.018	.016	.018	.017	.018	.016	.015	.016	.014	.014	.013	.013	.013	.010	.011	.008
20		.009	.009	.012	.011	.011	.013	.017	.017	.013	.015	.017	.016	.016	.015	.016	.014	.013	.013	.013	.013	.010	.011	.008
25		.008	.009	.010	.006	.016	.016	.016	.014	.016	.016	.018	.016	.016	.014	.013	.013	.013	.012	.011	.010	.011	.008	
35		.012	.012	.020	.019	.024	.023	.027	.027	.031	.029	.029	.029	.029	.027	.025	.023	.023	.024	.023	.018	.020	.013	.012
40		.010	.010	.014	.012	.018	.018	.022	.020	.023	.022	.023	.023	.023	.020	.018	.018	.018	.018	.018	.014	.010	.011	
46		.012	.010	.016	.014	.022	.023	.022	.021	.030	.027	.025	.025	.025	.020	.019	.020	-	.020	.019	.018	.014	.011	
52		.012	.012	.019	.018	.023	.024	.022	.022	.026	.026	.026	.026	.026	.020	.022	.022	.021	.021	.021	.016	.018	.013	
58		.013	.009	.013	.014	.018	.019	.020	.023	.024	.024	.025	.021	.020	.020	.020	.020	.020	.020	.020	.015	.014	.012	
67		.019	.016	.024	.023	.029	.027	.032	-	.034	.032	.032	.029	.028	.028	.026	.028	.028	.028	.026	.022	.022	.017	
76		.019	.020	.018	.026	.024	.023	.026	.026	.026	.030	.030	.030	.032	.031	.024	.024	.022	.027	.023	.018	.018	.014	
80		.016	.016	.020	.020	.026	.024	.026	.026	.030	.028	.030	.030	.030	.028	.024	.024	.024	-	.020	.018	.016	.012	
94		.016	.016	.024	.020	.028	.028	.028	.028	.032	.032	.036	.032	.024	.024	.028	.024	.028	.024	.028	.020	.020	.016	
103		.017	.016	.020	.020	.024	.026	.027	.027	.032	.030	.033	.035	.027	.028	.028	.023	.024	.024	.028	.022	.018	.016	
112		.018	.018	.019	.021	.027	.026	.024	.029	.033	.029	.034	.030	.028	.026	.026	.025	.025	.026	.026	.020	.019	.018	
121		.019	.019	.020	.022	.027	.027	.028	.028	.032	.030	.030	.030	.028	.026	.026	.025	.025	.022	.025	.020	.015	.015	
130		.018	.014	.023	.020	.030	.026	.027	.030	.034	.035	.032	.028	.028	.027	.030	.027	.026	.026	.025	.030	.020	.016	
139		.028	.024	.034	.032	.040	.036	.036	.040	.044	.044	.044	.040	.040	.036	.040	.038	.038	.038	.040	.034	.032	.028	
148		.024	.028	.032	.036	.036	.032	.036	.032	.044	.040	.040	.040	.038	.034	.035	.032	.032	.032	.032	.028	.026	.022	
157		.024	.024	.030	.028	.036	.032	.034	.032	.040	.040	.040	.040	.038	.034	.035	.032	.032	.032	.032	.028	.026	.022	
166		.024	.028	.032	.032	.036	.032	.032	.032	.040	.040	.040	.040	.036	.036	.036	.032	.032	.032	.032	.028	.026	.022	
175		.032	.032	.036	.040	.044	.044	.044	.044	.048	.052	.052	.048	.040	.040	.040	.044	.044	.048	.048	.048	.044	.040	
184		.028	.032	.036	.036	.040	.036	.044	.036	.048	.048	.048	.048	.044	.044	.047	.048	.051	.051	.050	.045	.044	.038	
193		.032	.032	.040	.036	.040	.040	.040	.040	.048	.060	.056	.056	.052	.052	.048	.052	.048	.056	.052	.052	.052	.044	
202		.040	.032	.048	.048	.052	.048	.048	.048	.055	.054	.054	.054	.048	.047	.048	.051	.051	.050	.045	.044	.038	.037	
211		-	.030	.042	.042	.050	.044	.046	.041	.055	.054	.054	.054	.048	.047	.048	.051	.051	.050	.045	.044	.038	.037	
235		-	-	-	-	-	-	.052	.048	.060	.056	.064	.056	.052	.048	.052	.048	.056	.052	.052	.052	.044	.036	
244		-	-	-	-	-	-	-	-	.048	.060	.040	.040	.060	.048	.052	.040	.056	.040	.048	.044	.040	.032	
253		.050	.040	.060	.070	.070	.070	.070	.060	.076	.064	.076	.064	.060	.060	.064	.064	.064	.064	.064	.064	.064	.064	
262		.064	.052	.076	.060	.088	.064	.084	.072	.096	.080	.096	.068	.068	.068	.068	.068	.068	.068	.068	.068	.068	.068	
271		.060	.055	.072	.068	.084	.072	.080	.072	.092	.080	.096	.076	.076	.076	.076	.076	.076	.076	.076	.076	.076	.076	
280		.068	.052	.080	.064	.098	.068	.084	.068	.096	.076	.096	.076	.076	.076	.076	.076	.076	.076	.076	.076	.076	.076	
289		.067	.068	.076	.076	.086	.084	.082	.080	.094	.089	.094	.094	.091	.088	.088	.088	.088	.088	.086	.077	.074	.068	
298		.068	.070	.080	.073	.088	.076	.085	.084	.096	.092	.093	.092	.083	.081	.085	.083	.088	.088	.080	.080	.078	.066	
313		.071	.071	.083	.080	.095	.087	.084	.084	.097	.095	.098	.096	.087	.080	.085	.083	.092	.092	.083	.080	.072	.064	

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TABLE B15 (Continued)
GAGE NO. 35CL TEST ITEM NO. 3 STRAIN IN MICROINCHES

TRAFFIC LINES																							
PATTERN		PASS NUMBER																					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22		
2	36	38	33	29	17	22	22	16	17	15	22	26	27	27	29	-	-	33	34	32	37		
5	36	27	31	31	26	22	19	17	17	18	16	17	17	22	21	22	26	31	31	36	31		
10	37	32	40	36	26	26	27	21	18	18	16	21	21	26	26	-	-	31	34	40	31		
15	36	31	26	26	31	-	25	26	26	26	26	16	18	23	24	23	23	25	24	29	35		
20	44	50	43	40	40	36	28	25	23	24	24	14	14	32	32	35	35	34	42	42	44		
25	42	42	38	41	31	33	22	23	22	20	23	26	25	36	32	33	31	42	44	39	39		
35	50	50	40	40	34	35	26	21	26	20	20	31	34	33	32	31	33	38	38	47	46		
40	42	39	39	41	31	33	26	21	21	21	21	26	26	31	31	31	31	39	38	46	39		
46	50	52	44	47	38	41	34	31	29	28	29	36	36	39	-	42	42	45	47	47	47		
52	51	47	46	45	39	42	33	33	29	28	28	34	33	39	39	39	36	42	42	48	48		
58	44	45	42	42	36	36	30	29	26	25	24	27	31	31	36	31	35	39	39	46	45		
66	49	48	47	47	39	37	34	-	26	29	29	36	35	-	39	39	39	44	45	48	47		
76	54	55	52	52	45	47	39	38	34	34	34	39	39	45	42	44	44	50	48	53	52		
85	45	42	42	42	35	35	29	29	26	26	25	29	29	36	29	-	-	42	42	45	47		
94	47	45	41	42	42	42	37	31	33	34	32	35	34	34	34	37	36	42	39	45	47		
103	46	50	44	44	38	36	31	33	29	28	30	32	33	37	37	37	37	39	45	47	48		
112	52	48	47	42	32	32	37	35	31	26	28	27	32	34	32	42	42	36	34	48	48		
121	48	48	42	40	37	34	27	29	27	27	27	27	27	29	37	40	40	42	42	48	42		
130	58	58	53	58	48	48	40	42	40	37	35	40	42	50	48	45	48	53	53	58	61		
139	11	11	16	12	10	7	10	5	7	7	10	10	10	10	10	10	10	10	10	10	10		
148	16	16	8	8	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	8		
157	10	11	6	6	6	5	5	5	6	5	6	6	5	6	5	6	5	5	7	7	9		
166	11	11	11	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	8	11	11		
175	16	16	11	8	5	5	5	5	5	11	8	11	8	5	8	5	8	5	5	11	16		
184	16	16	11	11	5	11	5	5	5	5	5	3	5	5	5	5	5	8	16	19	19		
193	13	16	11	11	5	5	5	5	5	5	5	5	5	5	5	5	11	5	10	16	16		
202	19	19	11	13	5	5	5	5	5	5	8	5	5	5	5	5	11	5	11	16	16		
211	-	16	8	11	11	8	5	5	5	5	8	8	8	8	8	8	8	11	13	16	16		
220	16	16	11	11	8	11	5	5	5	5	5	5	5	5	5	5	8	11	16	16	16		
235	24	16	11	13	8	8	8	5	5	5	5	5	5	8	8	5	5	11	19	21	21		
244	13	13	11	11	5	5	5	5	5	5	5	5	5	5	5	5	8	11	13	16	16		
253	16	21	11	11	16	11	13	5	8	5	5	11	5	19	11	16	11	24	16	21	16		
262	11	13	13	11	11	8	11	5	8	8	5	11	5	11	8	13	11	16	8	11	13		
271	13	13	8	11	5	5	5	5	5	5	5	8	8	8	8	8	8	11	11	11	13		
280	19	16	21	11	5	11	13	8	8	8	8	11	8	16	11	11	8	19	11	21	13		
289	24	18	28	16	25	16	21	15	10	20	8	16	13	16	15	19	11	29	16	21	19		
298	11	16	6	10	5	5	5	7	7	7	6	5	5	5	5	5	5	8	10	11	15		
313	11	12	8	10	5	5	5	5	5	5	5	5	5	5	5	5	5	8	9	13	13		

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TABLE B15 (Continued)
 CASE NO. 3 DC TEST ITEM NO. 3 DEFLECTION IN INCHES

PATTERN	TRAFFIC LINES																					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
2	.034	.052	.030	.029	.026	.025	.025	.014	.020	.018	.014	.020	.018	.020	.020	.023	.022	.026	.024	.026	.029	.028
5	.029	.027	.026	.026	.024	.022	.023	.017	.018	.018	.018	.022	.020	.026	.022	.024	.024	.025	.030	.030	.034	.030
10	.036	.032	.032	.030	.030	.026	.023	.023	.026	.026	.020	.022	.020	.020	.024	.026	.024	.028	.028	.028	.028	.028
15	.030	.030	.030	.028	.024	.026	.020	.024	.018	.020	.018	.020	.020	.020	.024	.024	.024	.024	.024	.024	.027	.026
20	.030	.027	.024	.023	.026	.022	.021	.017	.018	.015	.017	.016	.017	.018	.018	.020	.022	.023	.024	.024	.027	.026
25	.023	.023	.023	.026	.022	.022	.021	.017	.018	.014	.015	.018	.016	.017	.020	.022	.023	.021	.024	.024	.026	.026
35	.048	.049	.044	.048	.038	.031	.031	.030	.027	.028	.022	.028	.028	.024	.034	.040	.038	.040	.042	.044	.044	.046
40	.046	.044	.044	.043	.040	.034	.034	.032	.031	.026	.031	.024	.034	.033	.040	.038	.040	.037	.043	.042	.046	.046
46	.048	.045	.045	.045	.041	.037	.034	.032	.031	.026	.031	.024	.034	.033	.040	.038	.040	.038	.042	.042	.047	.046
52	.048	.045	.046	.042	.040	.037	.037	.032	.032	.027	.032	.026	.036	.032	.040	.038	.040	.036	.044	.041	.048	.046
58	.046	.045	.041	.044	.038	.036	.032	.030	.030	.026	.030	.026	.033	.030	.038	.034	.038	.036	.042	.041	.045	.040
67	.046	.045	.045	.039	.038	.033	.035	.030	.024	.024	.030	.025	.033	.030	.036	.034	.038	.035	.044	.040	.047	.044
76	.047	.045	.045	.039	.039	.037	.036	.030	.029	.026	.030	.024	.034	.030	.036	.034	.040	.037	.044	.041	.047	.044
85	.060	.056	.052	.052	.044	.040	.040	.038	.038	.032	.036	.032	.044	.036	.044	.044	.044	.044	.050	.048	.058	.054
94	.056	.052	.048	.052	.046	.044	.040	.036	.036	.032	.036	.032	.040	.036	.044	.044	.044	.044	.048	.048	.056	.052
103	.055	.052	.050	.048	.047	.040	.040	.035	.034	.028	.035	.029	.040	.035	.044	.040	.046	.040	.049	.040	.054	.052
112	.049	.045	.045	.040	.040	.038	.037	.029	.029	.025	.030	.023	.035	.030	.040	.037	.040	.039	.045	.042	.048	.046
121	.055	.052	.048	.046	.040	.035	.032	.032	.030	.024	.028	.024	.032	.034	.040	.036	.038	.036	.045	.042	.050	.047
130	.048	.050	.043	.046	.036	.040	.036	.033	.027	.025	.021	.026	.035	.040	.038	.037	.037	.038	.042	.044	.048	.047
139	.060	.060	.060	.052	.052	.056	.046	.044	.044	.036	.044	.040	.048	.040	.052	.048	.056	.048	.060	.056	.064	.060
148	.068	.060	.064	.056	.056	.052	.052	.048	.044	.040	.044	.040	.052	.044	.056	.052	.056	.056	.060	.056	.064	.060
157	.062	.058	.060	.054	.055	.048	.048	.042	.042	.038	.040	.036	.048	.048	.055	.052	.056	.052	.060	.056	.062	.060
166	.068	.060	.064	.056	.056	.052	.052	.044	.044	.040	.044	.040	.048	.048	.052	.052	.056	.052	.060	.056	.068	.060
175	.068	.060	.064	.056	.056	.052	.048	.044	.044	.040	.044	.040	.048	.048	.052	.056	.060	.052	.068	.060	.072	.064
184	.068	.064	.064	.060	.060	.056	.052	.048	.048	.040	.044	.040	.052	.048	.060	.056	.060	.056	.068	.060	.072	.068
193	.068	.064	.064	.060	.060	.056	.052	.048	.048	.040	.044	.040	.052	.048	.060	.056	.060	.056	.068	.060	.072	.068
202	.072	.068	.064	.060	.060	.056	.052	.048	.048	.040	.044	.040	.052	.048	.060	.056	.060	.056	.068	.060	.072	.068
211	.072	.068	.064	.060	.060	.056	.052	.048	.048	.040	.044	.040	.052	.048	.060	.056	.060	.056	.068	.060	.072	.068
220	.069	.063	.066	.060	.060	.056	.052	.048	.048	.040	.044	.040	.052	.048	.060	.056	.060	.056	.068	.060	.072	.068
235	.080	.068	.072	.068	.064	.060	.060	.056	.052	.048	.044	.040	.056	.048	.060	.056	.064	.056	.072	.064	.076	.070
244	.072	.064	.068	.060	.060	.056	.060	.060	.056	.048	.044	.040	.056	.048	.060	.056	.064	.060	.072	.064	.076	.072
253	.080	.070	.070	.070	.070	.060	.060	.050	.048	.044	.050	.044	.056	.056	.060	.060	.060	.060	.076	.068	.080	.076
262	.084	.080	.072	.072	.072	.064	.064	.056	.052	.048	.052	.044	.060	.056	.068	.064	.068	.064	.076	.068	.080	.076
271	.088	.076	.076	.072	.068	.068	.064	.052	.052	.049	.052	.048	.060	.052	.068	.064	.068	.064	.076	.068	.080	.076
290	.084	.084	.080	.072	.072	.072	.064	.060	.056	.050	.052	.057	.060	.056	.072	.064	.072	.068	.076	.074	.080	.080
299	.080	.078	.076	.070	.068	.067	.060	.056	.053	.049	.053	.048	.060	.056	.068	.070	.068	.065	.074	.072	.083	.076
298	.080	.070	.074	.070	.068	.060	.058	.052	.044	.044	.052	.044	.058	.053	.067	.060	.066	.059	.072	.068	.080	.074
313	.083	.075	.076	.070	.072	.064	.062	.052	.052	.048	.054	.044	.060	.054	.068	.064	.070	.064	.079	.070	.080	.074

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TABLE B15 (Continued)
GAGE NO. 3DEJT TEST ITEM NO. 3 DEFLECTION IN INCHES

PATTERN	TRAFFIC LINES																					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
2	.076	.074	.073	.073	.081	.080	.077	.076	.080	.088	.090	.091	.088	.088	.088	.086	.088	.089	.084	.086	.080	.081
5	.098	.084	.092	.081	.087	.085	.086	.080	.090	.088	.073	.073	.071	.071	.064	.073	.069	-	.068	.064	.062	.064
10	.065	.053	.067	.067	.070	.072	.071	.071	.073	.073	.074	.073	.084	.090	.088	.090	.085	.087	.081	.084	.071	.074
15	.073	.074	.080	.082	.084	-	.084	.090	.087	.092	.084	.090	.087	.090	.088	.089	.088	.089	.082	.087	.079	.080
20	.078	.094	.083	.087	.089	.088	.085	.089	.085	.091	.087	.091	.084	.089	.087	.089	.088	.072	.070	.075	.066	.072
25	.071	.067	.069	.063	.081	.079	.080	.079	.077	.080	.079	.081	.077	.078	.075	.079	.072	.072	.070	.075	.066	.072
33	.087	.095	.092	.100	.096	.104	.093	.099	.095	.100	.083	.089	.092	.099	.096	.100	.093	.099	.090	.094	.083	.088
40	.079	.076	.083	.091	.088	.085	.085	.080	.089	.085	.086	.084	.085	.080	.086	.085	.086	.082	.082	.080	.076	.076
46	.089	.081	.096	.086	.096	.091	.097	.092	.098	.097	.096	.089	.095	.090	.097	-	.099	.091	.093	.085	.088	.083
52	.096	.094	.106	.099	.109	.104	.108	.101	.108	.100	.108	.100	.108	.100	.109	.101	.106	.100	.105	.101	.096	.092
58	.092	.087	.099	.095	.101	.100	.102	.096	.103	.098	.104	.098	.102	.099	.104	.098	.104	.098	.100	.094	.094	.089
67	.104	.094	.105	.100	.110	.103	.108	-	.110	.102	.110	.101	.112	.101	-	.101	.108	.100	.105	.100	.096	.092
76	.107	.100	.112	.107	.116	.104	.113	.109	.110	.106	.116	.107	.113	.107	.115	.108	.112	.106	.109	.104	.105	.100
85	.143	.144	.160	.148	.164	.152	.160	.152	.164	.150	.160	.148	.160	.156	.160	.150	-	-	.155	.148	.148	.136
94	.128	.120	.136	.126	.140	.128	.136	.132	.140	.132	.140	.132	.136	.128	.138	.128	.138	.130	.132	.124	.124	.112
103	.125	.116	.132	.120	.136	.128	.132	.124	.137	.124	.135	.126	.131	.126	.135	.125	.134	.125	.127	.120	.120	.114
112	.121	.112	.135	.118	.130	.120	.126	.122	.128	.125	.125	.116	.124	.118	.122	.120	.126	.119	.118	.116	.112	.103
121	.116	.114	.122	.115	.124	.120	.122	.116	.125	.115	.125	.120	.124	.118	.126	.122	.126	.120	.122	.112	.114	.110
130	.130	.126	.137	.128	.142	.136	.138	.150	.144	.128	.142	.130	.136	.130	.138	.132	.140	.130	.135	.124	.128	.114
139	.158	.152	.164	.154	.168	.160	.164	.160	.170	.160	.160	.160	.160	.160	.160	.150	.160	.160	.150	.160	.150	.150
148	.140	.120	.140	.130	.150	.140	.140	.140	.150	.140	.150	.140	.140	.140	.150	.140	.150	.140	.150	.140	.140	.130
157	.132	.127	.139	.130	.148	.142	.147	.140	.146	.142	.148	.138	.140	.140	.140	.137	.144	.137	.136	.130	.137	.121
166	.140	.140	.150	.130	.150	.140	.140	.140	.150	.140	.150	.140	.140	.140	.150	.140	.150	.140	.140	.130	.140	.130
175	.160	.150	.160	.150	.170	.160	.170	.160	.170	.160	.180	.160	.160	.160	.170	.160	.170	.160	.150	.160	.160	.150
184	.160	.120	.150	.130	.140	.130	.140	.140	.140	.140	.140	.140	.140	.140	.140	.140	.140	.140	.140	.130	.130	.120
193	.130	.120	.140	.130	.140	.150	.140	.130	.140	.130	.130	.130	.130	.130	.140	.130	.140	.130	.140	.130	.130	.120
202	.150	.130	.160	.140	.160	.150	.150	.150	.160	.150	.160	.150	.150	.150	.160	.150	.160	.150	.160	.140	.140	.150
211	-	.128	.150	.132	.150	.140	.150	.137	.145	.143	.142	.138	.143	.137	.149	.130	.148	.138	.147	.130	.135	.120
220	.110	.105	.118	.108	.122	.111	.119	.112	.122	.113	.121	.110	.120	.111	.120	.110	.120	.110	.120	.110	.120	.100
235	.150	.140	.150	.140	.160	.150	.150	.150	.160	.130	.160	.140	.140	.140	.160	.140	.160	.140	.160	.140	.150	.130
244	.120	.100	.120	.110	.130	.120	.130	.120	.130	.120	.130	.090	.130	.130	.130	.130	.130	.120	.130	.110	.120	.100
253	.170	.150	.172	.160	.168	.168	.168	.160	.170	.170	.180	.170	.170	.170	.170	.170	.180	.170	.170	.160	.170	.160
262	.200	.170	.200	.180	.210	.180	.200	.180	.200	.180	.200	.170	.200	.190	.200	.190	.200	.190	.180	.170	.180	.170
271	.200	.190	.220	.200	.230	.200	.220	.200	.210	.200	.210	.190	.210	.210	.210	.210	.220	.200	.210	.200	.200	.180
280	.200	.190	.210	.210	.200	.190	.200	.200	.210	.200	.210	.200	.210	.210	.210	.210	.210	.210	.210	.200	.200	.180
289	.185	.170	.196	.175	.200	.90	.200	.82	.210	.188	.200	.179	.196	.190	.204	.190	.205	.188	.194	.172	.184	.168
298	.150	.140	.170	.154	.168	.152	.162	.156	.168	.155	.160	.157	.159	.150	.160	.150	.154	.150	.153	.150	.150	.140
313	.162	.150	.180	.155	.180	.165	.165	.164	.180	.170	.177	.168	.170	.162	.175	.170	.180	.164	.173	.160	.160	.147

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TABLE B15 (Continued)
GAGE NO. 304JIT TEST ITEM NO. 3 DEFLECTION IN INCHES

PATTERN	TRAFFIC LINE																					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
2	.054	.057	.056	.058	.058	.058	.057	.057	.061	.053	.055	.053	.055	.053	.053	.043	.055	.054	.054	.053	.048	.040
5	.050	.048	.053	.053	.054	.053	.056	.054	.055	.053	.053	.054	.053	.052	.052	.052	.052	.054	.054	.050	.048	.048
10	.050	.043	.050	.053	.053	.052	.052	.053	.055	.053	.053	.054	.053	.052	.052	.052	.052	.054	.054	.050	.048	.048
15	.052	.053	.055	.057	.059	.059	.060	.061	.061	.060	.058	.060	.054	.054	.060	.062	.060	.059	.055	.055	.051	.052
20	.055	.059	.061	.061	.057	.059	.067	.061	.063	.060	.055	.062	.057	.059	.062	.061	.063	.060	.058	.060	.056	.058
25	.049	.047	.053	.050	.055	.050	.044	.049	.051	.052	.047	.050	.048	.050	.051	.052	.049	.052	.050	.050	.045	.048
33	.112	.117	.121	.128	.123	.125	.124	.125	.124	.125	.110	.115	.124	.124	.126	.123	.120	.124	.122	.123	.112	.116
40	.085	.096	.103	.099	.106	.105	.104	.100	.106	.105	.108	.101	.104	.100	.105	.106	.110	.103	.104	.102	.101	.094
46	.124	.125	.132	.132	.137	.137	.134	.130	.134	.135	.138	.135	.134	.133	.139	.137	.138	.135	.136	.133	.127	.129
52	.132	.130	.135	.135	.138	.138	.138	.133	.139	.138	.139	.137	.139	.134	.141	.137	.138	.140	.134	.135	.129	.129
58	.113	.110	.117	.124	.124	.119	.118	.116	.120	.120	.122	.120	.121	.118	.125	.121	.123	.120	.121	.118	.116	.113
67	.132	.127	.135	.132	.136	.132	.135	.135	.135	.132	.133	.132	.132	.130	.132	.133	.137	.132	.132	.129	.125	.122
76	.152	.145	.154	.153	.160	.153	.153	.151	.153	.155	.154	.152	.152	.149	.154	.155	.153	.149	.151	.147	.144	.141
85	.148	.144	.156	.150	.158	.152	.154	.148	.156	.150	.156	.148	.148	.144	.150	.152	.152	.145	.150	.148	.148	.144
94	.144	.146	.148	.144	.152	.146	.146	.146	.148	.142	.148	.144	.143	.144	.145	.143	.152	.145	.150	.140	.140	.132
103	.151	.142	.153	.150	.160	.153	.155	.152	.160	.148	.156	.150	.157	.146	.160	.153	.158	.152	.154	.143	.142	.139
112	.146	.138	.160	.140	.156	.144	.148	.139	.150	.142	.148	.137	.148	.139	.151	.146	.150	.144	.144	.140	.140	.130
121	.136	.134	.146	.138	.146	.140	.142	.134	.152	.140	.147	.144	.148	.140	.152	.145	.147	.143	.147	.140	.140	.135
130	.168	.160	.172	.169	.176	.174	.176	.168	.174	.174	.176	.172	.176	.165	.172	.172	.172	.172	.174	.167	.167	.160
139	.176	.164	.170	.168	.176	.168	.190	.170	.190	.180	.174	.170	.180	.170	.180	.160	.180	.170	.180	.160	.160	.160
148	.160	.140	.150	.140	.160	.150	.160	.140	.170	.150	.160	.150	.160	.140	.170	.150	.160	.150	.160	.150	.160	.140
157	.143	.130	.150	.142	.158	.141	.150	.137	.150	.145	.150	.142	.146	.139	.150	.145	.150	.138	.145	.140	.140	.140
166	.160	.140	.160	.140	.170	.150	.160	.140	.160	.150	.160	.140	.160	.150	.160	.150	.160	.150	.150	.140	.150	.140
175	.170	.160	.170	.170	.180	.170	.170	.160	.180	.160	.180	.160	.180	.160	.180	.170	.180	.170	.180	.160	.160	.160
184	.160	.140	.160	.150	.170	.150	.150	.140	.160	.150	.160	.150	.160	.140	.160	.150	.160	.150	.160	.150	.150	.140
193	.150	.140	.150	.150	.160	.150	.160	.140	.160	.150	.160	.150	.160	.140	.160	.150	.160	.150	.160	.150	.150	.140
202	.150	.140	.180	.160	.170	.160	.170	.160	.180	.160	.180	.165	.175	.170	.180	.165	.180	.150	.175	.165	.150	.140
211	.159	.175	.160	.180	.180	.166	.175	.158	.178	.162	.178	.162	.175	.162	.178	.161	.181	.160	.173	.160	.165	.155
220	.145	.145	.148	.145	.151	.148	.150	.135	.150	.146	.150	.147	.160	.140	.150	.140	.150	.150	.150	.150	.140	.140
235	.170	.160	.170	.160	.180	.160	.170	.160	.180	.160	.180	.160	.150	.160	.180	.170	.180	.170	.180	.170	.160	.160
244	.160	.150	.160	.140	.170	.150	.170	.150	.160	.140	.160	.140	.160	.140	.170	.150	.170	.150	.160	.150	.160	.140
253	.180	.160	.180	.170	.190	.170	.190	.150	.170	.160	.170	.160	.170	.160	.170	.150	.170	.150	.160	.150	.160	.140
262	.190	.230	.190	.190	.210	.200	.210	.180	.190	.170	.190	.160	.170	.170	.190	.180	.190	.180	.190	.180	.190	.170
271	.190	.170	.200	.180	.200	.190	.200	.180	.200	.190	.200	.180	.200	.180	.200	.190	.200	.190	.200	.190	.180	.180
280	.187	.171	.199	.181	.200	.185	.195	.175	.200	.180	.200	.183	.194	.173	.200	.185	.200	.181	.192	.180	.185	.175
289	.168	.154	.175	.162	.170	.162	.175	.160	.179	.170	.180	.162	.180	.162	.182	.161	.185	.160	.180	.154	.153	.151
298	.165	.158	.177	.166	.187	.170	.180	.165	.185	.168	.185	.160	.174	.160	.178	.167	.186	.170	.180	.170	.166	.155
313																						

Sheet 27 of 30

PATTERN		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
		PASS NUMBER																					
15	95	99	74	74	53	53	62	68	106	53	53	63	53	74	70	70	63	73	70	70	63	75	74
20	125	125	73	53	62	62	70	60	70	50	53	-	-	-	-	75	62	-	-	-	-	-	-
25	83	85	74	74	85	70	74	-	-	-	-	74	-	75	106	96	80	85	75	75	74	75	-
35	31	83	78	79	76	74	74	74	72	72	73	-	-	62	66	74	74	74	84	74	84	84	74
40	66	74	64	64	61	74	86	74	74	68	55	55	55	75	70	100	64	74	65	78	64	60	73
46	74	69	54	55	64	65	64	64	74	45	47	42	53	65	80	65	-	69	59	50	55	64	68
51	67	64	66	63	74	79	64	68	68	52	52	52	52	70	74	84	73	70	89	61	59	73	65
58	74	74	76	65	70	86	77	77	63	61	58	57	58	68	70	72	87	78	64	74	62	76	61
67	-	64	70	75	110	110	-	-	-	70	60	58	60	80	70	75	95	76	102	72	70	85	80
76	80	75	69	63	72	96	85	85	80	50	54	48	59	73	73	100	130	96	105	90	90	100	100
85	79	70	70	64	79	77	78	78	80	60	85	64	90	75	72	80	115	-	-	72	62	68	76
94	-	-	-	94	83	90	79	79	78	57	65	60	65	79	77	80	98	78	106	74	70	80	76
103	88	75	75	70	75	113	83	83	74	61	69	69	61	76	76	100	92	70	100	64	75	70	70
112	74	70	70	64	75	108	74	74	74	58	72	62	-	70	70	91	100	76	102	69	64	78	78
121	67	65	60	58	75	70	65	65	65	50	50	50	53	60	65	80	95	75	107	60	65	70	70
130	70	72	60	69	79	62	58	72	45	53	48	48	48	58	74	62	63	59	64	58	55	68	73
157	65	55	55	55	80	80	60	60	70	45	60	50	50	55	90	-	-	-	-	-	-	-	-
166	70	60	60	60	75	110	65	65	60	40	45	45	40	55	60	90	85	65	110	65	55	65	65
175	65	60	60	55	75	65	50	50	60	45	40	40	40	60	55	65	65	65	65	60	55	70	55
184	60	60	50	60	80	65	55	55	50	45	45	40	45	50	55	85	80	-	-	-	-	-	-
193	60	65	60	55	60	80	55	55	55	35	50	40	40	55	60	85	85	85	80	50	60	65	65
202	70	90	60	55	85	85	55	55	65	40	45	35	45	55	55	90	95	90	60	50</			

TABLE B1.5 (Continued)
GAGE NO. 3SSSJL TEST ITEM NO. 3 STRAIN IN MICROINCHES

TRAFFIC LANE#																							
		1	2	3	4	5	PASS NUMBER								3	3	2	1					
PATTERN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
15	49	49	50	46	57	-	61	70	70	64	65	73	54	55	75	63	63	60	52	50	50	42	
20	64	65	53	70	65	65	42	53	70	72	-	-	95	82	-	-	-	-	-	-	-	-	
25	42	32	50	53	73	55	-	-	-	-	-	-	106	125	74	74	65	55	55	53	35	32	
35	53	50	-	-	-	-	-	-	-	-	-	-	64	53	61	62	62	36	37	31	31	21	
40	-	31	37	40	42	57	60	50	55	67	82	64	68	51	45	57	64	69	58	52	44	24	
46	74	64	75	74	77	77	82	79	84	84	91	85	84	71	76	-	77	76	74	68	63	64	
51	74	78	79	82	84	85	85	85	93	92	95	92	85	85	85	85	83	84	84	83	68	75	
58	63	52	63	55	68	70	68	69	73	73	71	79	73	65	78	66	68	69	63	58	57	57	
67	-	80	82	97	100	87	-	-	95	91	92	94	95	89	76	90	102	88	95	91	62	86	
76	97	106	122	122	123	128	123	118	123	123	131	122	122	117	122	112	118	108	100	100	96	91	
85	79	65	74	70	80	73	78	80	82	-	89	80	79	75	78	73	-	-	-	69	70	63	
94	-	-	-	92	83	103	72	100	81	89	82	82	70	72	75	100	80	76	74	73	70	60	
112	80	74	86	79	85	85	90	80	92	81	92	72	85	76	-	76	83	85	75	73	70	69	
121	68	65	85	75	90	85	85	75	95	85	95	90	90	80	85	80	92	80	87	75	75	63	
130	107	107	116	105	123	121	122	117	137	128	130	128	119	116	113	128	124	121	117	116	100	101	
148	5	5	10	10	20	25	10	10	20	20	30	25	10	10	25	20	25	25	25	25	10	15	
157	10	5	10	5	20	20	10	10	15	20	25	20	10	10	10	-	-	-	-	-	-	-	
166	5	5	5	5	5	5	5	5	8	8	8	5	5	5	5	10	11	11	5	5	5	5	
175	5	5	5	5	5	5	5	5	10	10	10	5	5	5	5	10	10	10	5	5	5	5	
184	5	5	5	5	10	10	5	5	10	15	15	10	5	5	5	10	10	-	-	-	-	-	
193	5	5	5	5	15	15	10	5	20	15	20	10	10	5	5	15	20	10	5	5	5	5	
202	5	5	5	5	5	5	5	5	20	15	25	15	5	10	10	10	15	10	5	10	5	5	
211	21	21	5	5	11	10	10	5	22	11	23	15	10	5	5	5	10	15	5	5	5	5	
220	5	5	10	5	20	15	5	5	25	10	10	15	5	10	15	15	20	15	10	5	5	5	
235	5	5	5	5	10	10	5	5	15	15	20	15	5	5	15	10	10	15	5	5	5	5	

TABLE B15 (Concluded)
CASE NO. 38CT TEST ITEM NO. 3 STRAIN IN MICROINCHES

PATTERN	THREE LINES																	1
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
2	37	42	32	13	10	6	22	28	27	23	11	11	7	15	6	17	-	21
5	36	41	35	31	11	12	11	14	18	21	17	21	11	16	6	11	11	22
10	48	47	37	42	16	15	8	8	13	19	19	19	12	11	13	16	-	42
15	53	48	53	53	30	-	-	16	21	16	21	21	16	11	13	16	-	36
20	53	47	47	45	18	14	21	16	24	21	24	22	16	15	11	14	13	34
25	46	48	50	46	16	21	14	11	19	18	22	20	14	14	16	14	14	37
35	50	48	43	47	16	13	16	16	24	22	27	31	20	13	10	10	31	41
40	42	45	37	40	13	13	11	11	19	19	19	21	11	11	11	11	13	40
46	40	45	37	40	11	16	11	11	24	21	21	21	13	11	11	-	21	37
52	45	47	37	38	11	11	11	13	21	25	21	24	13	13	8	13	11	35
58	45	45	42	37	11	13	11	14	14	16	16	19	11	15	11	8	9	37
94	50	42	32	32	8	8	5	2	5	9	5	8	11	11	11	8	11	40
112	47	47	32	27	10	8	11	8	24	21	23	24	16	16	8	8	8	33
121	47	52	39	29	5	10	10	10	21	21	21	21	10	10	5	8	8	30
130	44	44	29	29	29	10	13	13	26	23	23	21	13	13	5	10	5	26
139	42	48	37	32	31	16	16	11	31	28	28	27	16	16	16	16	16	31
148	55	52	42	31	31	13	16	10	26	26	23	26	10	16	10	10	16	26
157	52	50	39	32	10	10	13	16	24	26	26	26	16	16	10	11	8	10
166	49	52	34	36	13	13	21	21	29	31	31	24	21	21	10	13	13	36
175	45	35	35	35	11	11	27	27	32	32	37	32	19	21	8	11	11	32
184	57	60	47	39	13	18	16	16	23	23	23	23	13	10	13	16	16	36
193	60	62	42	47	18	15	13	13	23	21	23	21	16	18	16	13	16	36
202	52	62	47	42	16	16	16	13	26	26	26	26	18	13	13	13	16	36
211	-	57	36	44	16	18	14	11	26	26	26	26	16	13	18	18	16	39
220	57	57	47	42	13	21	10	12	6	21	21	18	10	8	16	18	18	44
225	60	60	59	47	18	16	18	13	26	26	26	29	18	18	18	16	10	39
244	60	62	52	52	23	23	22	21	18	16	26	23	18	18	18	18	18	42
253	68	68	55	39	21	21	18	16	23	18	23	21	21	18	16	18	16	49
262	62	62	42	47	21	13	21	16	26	26	26	26	21	16	16	16	18	44
271	60	62	49	44	18	23	23	23	26	23	26	26	23	23	18	15	15	47
280	65	65	47	44	13	21	21	16	29	26	26	23	21	18	18	21	21	52
289	60	62	47	44	18	21	21	16	26	21	26	23	21	13	18	21	20	44
298	68	65	44	36	16	13	21	18	26	23	29	29	21	16	16	13	10	44
313	63	60	49	44	16	16	21	18	29	21	26	24	21	18	13	13	18	47

DYNAFLECT MEASUREMENTS DURING
12-WHEEL-ASSEMBLY TRAFFIC

Item 1

Item 1

Date	Traffic Volume Patterns	Sensors				
		1	2	3	4	5
<u>South Lane - Position 1</u>						
13 Oct 69	-	1.20	0.96	0.85	0.72	0.64
14 Oct 69	1	0.83	0.70	0.63	0.54	0.46
17 Oct 69	7	1.35	0.84	0.75	0.69	0.62
21 Oct 69	19	1.03	0.90	0.80	0.69	0.58
29 Oct 69	*	1.50	1.25	1.08	0.95	0.84
<u>South Lane - Position 2</u>						
13 Oct 69	-	1.20	0.95	0.81	0.70	0.60
14 Oct 69	1	1.03	0.78	0.64	0.55	0.49
15 Oct 69	4	1.74	0.85	0.70	0.65	0.56
21 Oct 69	19	1.20	0.83	0.70	0.62	0.53
23 Oct 69	37	1.29	1.03	0.90	0.80	0.68
29 Oct 69	37*	1.32	1.04	0.90	0.76	0.64
8 Dec 69	301	0.85	0.75	0.64	0.55	0.49
<u>South Lane - Position 3</u>						
13 Oct 69	-	1.38	1.15	0.98	0.84	0.71
14 Oct 69	1	1.14	1.01	0.83	0.75	0.61
21 Oct 69	19	1.08	0.95	0.83	0.71	0.60
23 Oct 69	37	1.02	0.92	0.83	0.71	0.60
29 Oct 69	37*	1.20	1.03	0.91	0.80	0.66
8 Dec 69	301	0.85	0.77	0.67	0.58	0.50

NOTE: All readings are in mils (0.001")

*Initial reading after overlay was constructed (no traffic on overlay, 37 traffic patterns on base pavement).

(Sheet 1 of 4)

TABLE B16 (Continued)

Item 2						
Date	Traffic Volume Patterns	Sensors				
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
			<u>South Lane - Position 1</u>			
11 Oct 69	-	0.65	0.60	0.58	0.54	0.49
14 Oct 69	1	0.58	0.58	0.55	0.50	0.46
22 Oct 69	30	0.65	0.60	0.58	0.54	0.49
23 Oct 69	37	0.70	0.67	0.64	0.59	0.55
			<u>South Lane - Position 2</u>			
11 Oct 69	-	1.11	0.69	0.62	0.56	0.51
14 Oct 69	1	1.05	0.65	0.58	0.52	0.47
22 Oct 69	30	0.81	0.76	0.68	0.61	0.55
23 Oct 69	37	1.02	0.82	0.75	0.68	0.60
			<u>South Lane - Position 3</u>			
11 Oct 69	-	1.23	1.05	0.93	0.81	0.71
14 Oct 69	1	1.41	1.24	1.08	0.93	0.85
22 Oct 69	30	0.90	0.83	0.75	0.68	0.60
23 Oct 69	37	1.25	1.15	1.03	0.93	0.83
29 Oct 69	38	1.86	1.56	1.34	1.15	0.99
19 Nov 69	176	2.04	1.88	1.65	1.34	1.18

(Sheet 2 of 4)

TABLE B16 (Continued)

Item 3

<u>Date</u>	<u>Traffic Volume Patterns</u>	<u>Sensors</u>				
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
			<u>South Lane - Position 1</u>			
13 Oct 69	-	0.48	0.46	0.45	0.43	0.40
14 Oct 69	1	0.47	0.45	0.44	0.42	0.39
22 Oct 69	30	0.41	0.40	0.39	0.36	0.35
23 Oct 69	37	0.54	0.51	0.49	0.46	0.44
			<u>South Lane - Position 2</u>			
13 Oct 69	-	0.95	0.52	0.47	0.42	0.39
14 Oct 69	1	0.92	0.60	0.55	0.50	0.45
22 Oct 69	30	0.75	0.45	0.40	0.35	0.31
23 Oct 69	37	0.90	0.50	0.45	0.40	0.35
13 Nov 69		1.20	0.32	0.30	0.29	0.27
			<u>South Lane - Position 3</u>			
13 Oct 69	-	0.97	0.86	0.76	0.65	0.56
14 Oct 69	1	0.97	0.86	0.76	0.65	0.56
22 Oct 69	30	0.80	0.71	0.63	0.54	0.46
23 Oct 69	37	0.86	0.78	0.70	0.63	0.55
4 Nov 69	73	1.25	1.11	0.97	0.86	0.75
10 Nov 69	112	0.71	0.66	0.60	0.51	0.46

(Sheet 3 of 4)

TABLE B16 (Concluded)

Item 4

Date	Traffic	Sensors				
	Volume	1	2	3	4	5
	Patterns		<u>South Lane - Position 1</u>			
11 Oct 69	-	0.94	0.88	0.80	0.70	0.56
13 Oct 69	-	0.89	0.85	0.76	0.65	0.57
21 Oct 69	19	1.00	0.99	0.91	0.79	0.65
29 Oct 69	40**	1.31	1.23	1.10	0.94	0.78
5 Dec 69	289	0.79	0.77	0.72	0.64	0.55
<u>South Lane - Position 2</u>						
11 Oct 69	-	1.80	0.80	0.66	0.56	0.46
13 Oct 69	-	1.80	0.86	0.58	0.47	0.43
17 Oct 69	7	1.86	1.03	0.84	0.70	0.60
21 Oct 69	19	1.61	0.90	0.78	0.65	0.53
10 Nov 69	112	1.02	0.90	0.78	0.65	0.53
<u>South Lane - Position 3</u>						
11 Oct 69	-	1.63	1.29	1.01	0.80	0.63
13 Oct 69	-	1.84	1.44	1.14	0.90	0.71
21 Oct 69	19	1.46	1.20	0.96	0.79	0.60
10 Nov 69	112	0.99	0.91	0.80	0.65	0.56
9 Dec 69	312	0.69	0.66	0.60	0.56	0.47

**Overlay was placed after 37 patterns.

Sheet 4 of 4

TABLE R17
TWIN-TANDEM-ASSEMBLY TRAFFIC TESTS
GAGE NO. 2NSCT TEST ITEM 2 STRAIN IN MICROINCHES

PATTERN	Traffic Lines									
	1		2		3		4		5	
	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST
1	85	95	105	122	106	103	119	117	96	117
			95	95	85	106	117	117		
			101	90	90	90	106	101		
			72	58	80	64	101	106		
					80	101				
5	66	72	53	53	50	45	69	64	48	53
			48	48	48	40	74	66		
			53	48	48	40	72	53		
			74	64	45	37	48	48		
					72	58				
10	66	66	42	50	56	40	69	64	42	77
			90	64	50	42	72	64		
			69	50	48	37	72	69		
			40	35	45	40	69	64		
					53	42				
15	66	48	40	37	37	30	64	53	35	29
			35	29	32	29	58	45		
			61	68	29	27	50	42		
			29	27	32	27	48	40		
					29	27				
20	58	42	40	27	37	27	45	35	37	45
			45	37	42	27	45	35		
			37	32	40	29	48	35		
			40	27	40	-	48	35		
					42	37				
25	48	42	27	21	27	24	37	29	29	24
			27	21	27	24	40	29		
			29	21	32	21	37	29		
			26	24	29	21	35	32		
					40	35				
30	53	42	63	27	32	27	58	27	32	27
			37	21	32	22	42	32		
			37	21	27	32	37	37		
			37	16	37	27	37	37		
					37	27				
35	32	32	11	-	16	21	37	32	11	11
			21	-	27	16	27	27		
			-	-	21	16	32	53		
			16	-	16	11	27	64		
					16	27				
					-	-				
40	53	85	32	27	28	32	48	44	16	11
			37	27	32	37	48	64		
			27	21	32	37	48	48		
			27	32	37	32	48	48		
			21	53	37	32				

Sheet 1 of 10

TABLE B17 (Continued)

PATTERN	Traffic Lines									
	1	2	3	4	5	6	7	8	9	10
	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST
45	43	32	16	16	11	16	32	37	27	42
			16	85	16	16	37	37		
			37	16	16	16	27	32		
			11	16	16	16	32	37		
					16	16				
50	-	-	-	-	-	-	82	-	-	-
			21	11	11	16	43	53		
					16	16	48	43		
					27	16				
55	43	43	21	11	21	16	32	32	27	21
			16	16	16	21	37	32		
			21	16	21	21	27	27		
			21	21	16	16	37	43		
					16	21				
60	42	27	21	11	21	16	39	48	16	11
			16	42	16	21	37	37		
			42	11	16	27	37	37		
			16	8	16	21	37	37		
					21	27				
65	32	21	16	70	16	16	37	32	21	37
			16	53	16	11	37	32		
			11	16	16	13	37	37		
			11	16	16	16	40	37		
					11	48				
68	37	27	16	11	16	21	37	37	21	32
			13	11	16	21	37	32		
			11	8	11	11	40	37		
			13	16	16	16	40	37		
					16	16				

TABLE B17 (Continued)

GAGE NO. 2NSCL TEST ITEM 2 STRAIN IN MICROINCHES

PATTERN	Traffic Lines									
	1	2	3	4	5	6	7	8	9	10
	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST
1	95	106	103	111	95	103	122	127	106	106
			106	108	101	101	122	111		
			111	106	95	95	117	117		
			95	106	98	108	117	122		
					106	114				
5	80	90	103	117	98	101	103	122	114	133
			101	114	93	103	109	119		
			114	117	95	101	119	119		
			125	122	98	103	101	114		
					117	122				
10	74	85	95	114	95	95	111	127	114	138
			117	114	88	95	106	122		
			109	117	88	98	106	117		
			93	98	93	95	106	119		
					103	109				
15	74	74	103	111	80	90	106	119	101	114
			103	114	80	90	117	111		
			95	103	80	77	103	98		
			101	103	77	80	90	90		
					77	80				
20	85	80	98	98	88	74	111	98	95	125
			95	106	92	80	111	95		
			95	103	74	74	103	103		
			109	106	77	77	106	103		
					77	80				
25	88	88	90	103	77	77	109	106	114	109
			109	109	74	74	90	88		
			103	98	72	74	95	111		
			109	109	80	80	95	106		
					80	80				
30	90	85	106	106	69	74	106	101	95	101
			106	101	74	74	106	95		
			108	108	74	74	106	103		
			101	95	69	69	101	101		
					74	74				
35	69	90	101	95	85	90	108	106	106	111
			91	101	84	84	106	111		
			85	85	80	74	106	111		
			85	85	74	85	106	122		
					85	90				
40	80	101	106	106	80	85	122	111	106	106
			95	95	85	85	111	122		
			90	106	75	90	117	122		
			95	101	86	88	117	117		
					75	80				

Sheet 3 of 10

TABLE B17 (Continued)

PATTERN	Traffic Lines									
	1		2		3		4		5	
	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST
45	70	80	90	90	70	70	95	101	111	106
			95	101	69	75	106	90		
			106	95	75	80	101	117		
			101	80	85	75	111	117		
					85	90				
50	111	90	95	90	80	95	80	111	101	111
			106	106	80	80	106	106		
			101	101	95	82	111	133		
			106	106	80	80	106	117		
					80	80				
55	58	80	90	95	70	80	95	117	98	106
			90	101	75	90	106	106		
			90	95	69	85	101	111		
			95	95	64	85	111	143		
					70	80				
60	80	95	90	93	70	55	95	123	106	90
			95	111	70	80	80	117		
			106	106	70	83	101	123		
			95	106	80	85	95	123		
					75	85				
65	80	80	106	117	70	70	106	111	101	127
			90	117	73	73	106	103		
			95	111	70	75	117	117		
			95	117	80	75	122	106		
					70	80				
68	80	101	95	95	63	85	106	122	115	127
			90	90	70	80	101	125		
			95	106	75	75	101	111		
			92	106	70	80	106	117		
					65	80				

TABLE B17 (Continued)

GAGE NO. 2NSSWJ TEST ITEM 2 STRAIN IN MICROINCHES

PATTERN	Traffic Lines									
	1		2		3		4		5	
	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST
1	114	103	98	-	-	-	127	180	127	143
			159	159	127	133	175	159		
			159	159	117	122	133	149		
			27	42	37	64	127	122		
					53	74				
5	66	77	21	42	16	40	42	61	32	16
			23	42	19	27	48	53		
			29	40	19	40	19	42		
			40	53	19	35	27	43		
					50	50				
10	53	74	35	32	21	21	40	48	50	19
			37	37	16	24	42	56		
			37	29	16	21	40	45		
			37	27	19	24	42	42		
					13	19				
15	53	61	42	37	16	19	42	42	40	42
			42	27	16	24	40	40		
			42	37	16	16	74	37		
			48	40	16	16	37	37		
					16	15				
20	48	58	16	16	11	11	77	37	11	45
			11	11	16	11	35	29		
			11	11	13	13	42	37		
			13	19	-	-	-	-		
					11	16				
25	53	61	16	11	11	16	42	45	13	32
			13	24	16	19	37	35		
			13	13	16	16	40	40		
			16	16	13	16	35	27		

GAGE FAILED @ 26 PATTERNS.

TABLE B17 (Continued)

GAGE NO. 2NSSEJT TEST ITEM 2 STRAIN IN MICROINCHES

PATTERN	Traffic Lines									
	1		2		3		4		5	
	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST
1	125	119	127	117	117	127	127	131	117	85
							58	-		

NO FURTHER READINGS

TABLE B17 (Continued)

GAGE NO. 3NSCT TEST ITEM 3 STRAIN IN MICROINCHES

PATTERN	Traffic Lines									
	1		2		3		4		5	
	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST
1	93	98	127	-	98	103	101	111	90	138
			133	106	106	106	117	101		
			138	106	101	101	111	106		
			154	149	103	106	106	111		
					106	108				
5	-	90	119	109	101	101	101	95	-	90
			-	-	101	88	106	106		
			103	104	98	101	111	109		
			82	80	95	98	111	103		
					82	-				
6	77	82	-	98	82	90	80	90	53	74
			-	98	72	85	85	101		
			114	101	85	90	85	85		
			-	85	90	85	83	80		
					-	-				

TABLE B17 (Continued)

GAGE NO. 3NSCL TEST ITEM 3 STRAIN IN MICROINCHES

PATTERN	Traffic Lines									
	1		2		3		4		5	
	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST
1	93	109	77	114	74	82	101	117	69	90
			80	85	69	80	101	85		
			85	90	75	80	111	90		
			90	106	75	82	85	111		
					80	85				
5	66	90	65	98	72	80	98	98	80	80
			72	79	72	72	95	92		
			90	82	66	72	90	80		
			98	111	66	72	69	80		
					95	80				
8	80	74	45	77	66	72	88	93	72	74
			85	80	66	72	82	88		
			66	90	64	72	98	65		
			69	69	58	77	93	72		
					72	72				
9	74	76	45	-	-	-	-	-	-	-

TABLE B17 (Continued)

GAGE NO. 3NSSWJT TEST ITEM 3 STRAIN IN MICROINCHES

PATTERN	Traffic Lines									
	1		2		3		4		5	
	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST
1	85	90	106	125	111	117	117	138	122	133
			122	117	106	117	127	127		
			122	117	106	117	127	133		
			111	122	106	126	133	133		
					122	127				
5	125	111	201	221	191	186	191	186	212	233
			239	233	212	207	217	217		
			271	239	207	207	318	228		
			233	254	196	207	270	223		
					239	233				
10	154	233	48	37	32	27	74	85	53	27
			58	58	27	21	58	58		
			58	37	32	30	58	63		
			48	32	37	21	64	85		
					37	27				
14	122	170	11	11	11	11	16	16	-	-
			-	-	11	16	-	-		
			58	27	11	27	-	85		
			37	-	32	11	159	58		
					-	-				

TABLE B17 (Concluded)

GAGE NO. JNSSEJT TEST ITEM 3 STRAIN IN MICROINCHES

PATTERN	Traffic Lines									
	1		2		3		4		5	
	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST	WEST	EAST
12	80	106	-	-	-	55	106	74	-	74
			143	111	69	64	80	58		
			122	95	69	64	-	74		
			127	90	69	64	74	58		
					-	69				
15	85	85	101	90	58	58	69	69	58	90
			-	-	-	-	-	-		
			111	127	64	58	53	58		
			-	-	58	58	69	58		
					-	58				
20	80	85	130	85	58	53	53	48	48	106
			-	-	53	53	64	48		
			-	-	-	-	53	58		
			58	90	53	58	58	53		
					53	64				
25	80	80	101	95	48	53	53	69	58	48
			148	90	58	53	53	58		
			90	101	53	53	53	58		
			95	90	58	53	53	53		
					48	48				
30	49	41	82	87	25	33	33	41	33	50
			82	62	33	33	41	33		
			39	41	41	33	41	41		
			82	65	33	33	41	49		
					41	25				

NO READINGS AFTER 34 PATTERNS

ITEM 1

TEST POSITIONS

1. CENTER OF SLAB
2. TANGENT TO LONGITUDINAL JOINT
3. TANGENT TO TRANSVERSE JOINT

ITEM 2

TEST POSITIONS

4. CENTER OF SLAB
5. TANGENT TO LONGITUDINAL JOINT
6. TANGENT TO TRANSVERSE JOINT
7. PARTIAL DEFLECTION GAGE
READING 25 PD
8. PRESSURE CELL 2 P41
9. PRESSURE CELL 2 P13
10. PRESSURE CELL 23 P23

ITEM 3

TEST POSITIONS

11. CENTER OF SLAB
12. TANGENT TO LONGITUDINAL JOINT
13. TANGENT TO TRANSVERSE JOINT
14. PARTIAL DEFLECTION GAGE
READING 35 PD

ITEM 4

TEST POSITIONS

- 15,000-lb LOAD ONLY
15. CENTER OF SLAB
16. TANGENT TO LONGITUDINAL JOINT

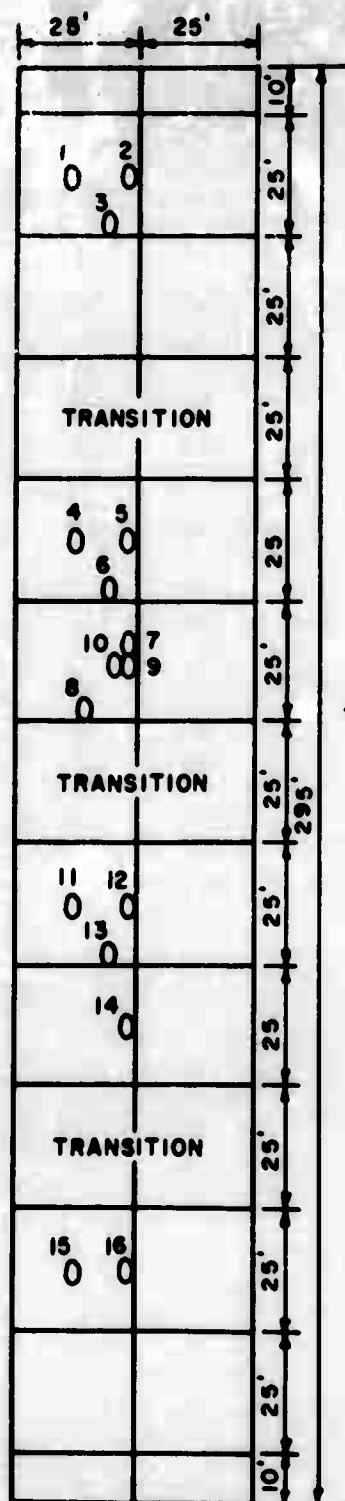


Figure B1. Wheel Positions for Single-Wheel Static Load Tests, Rigid Pavement Test Section

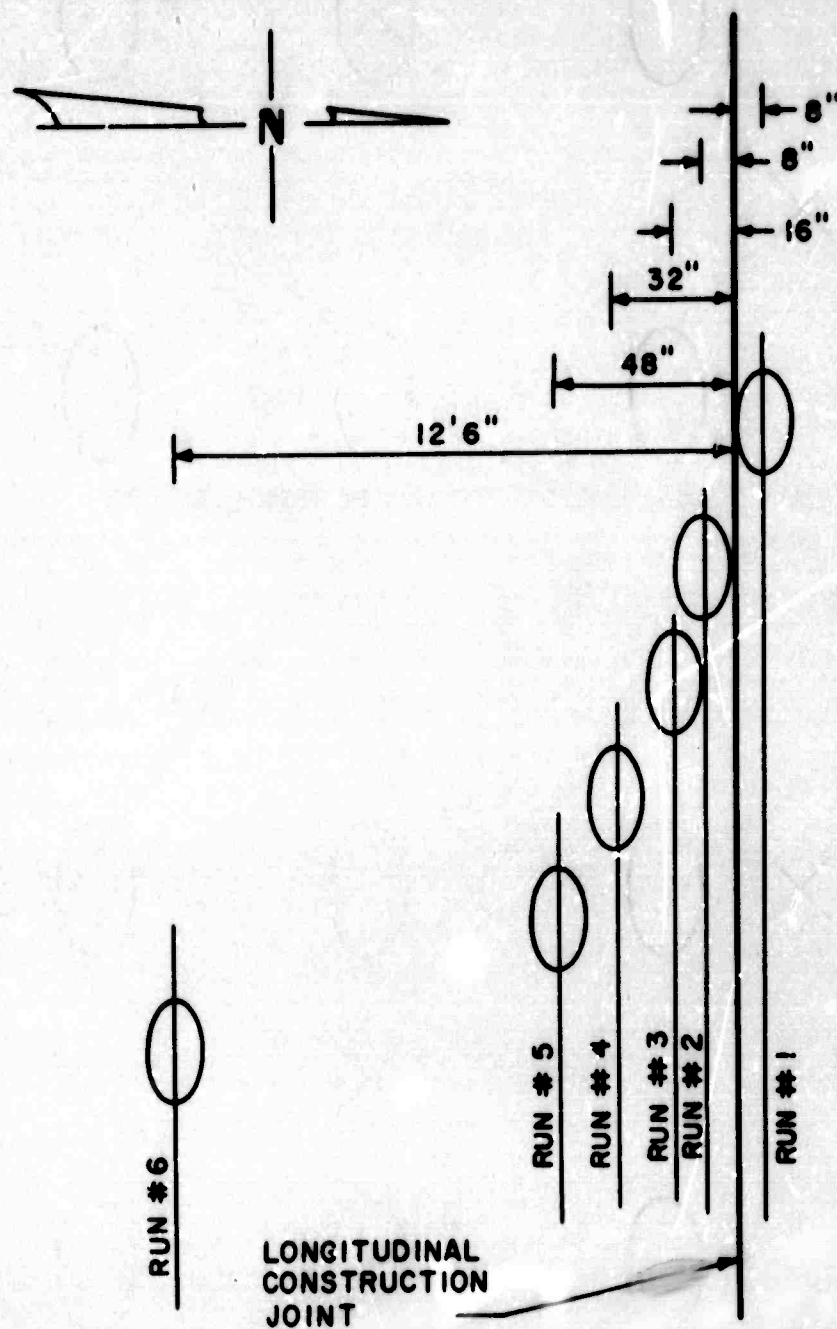
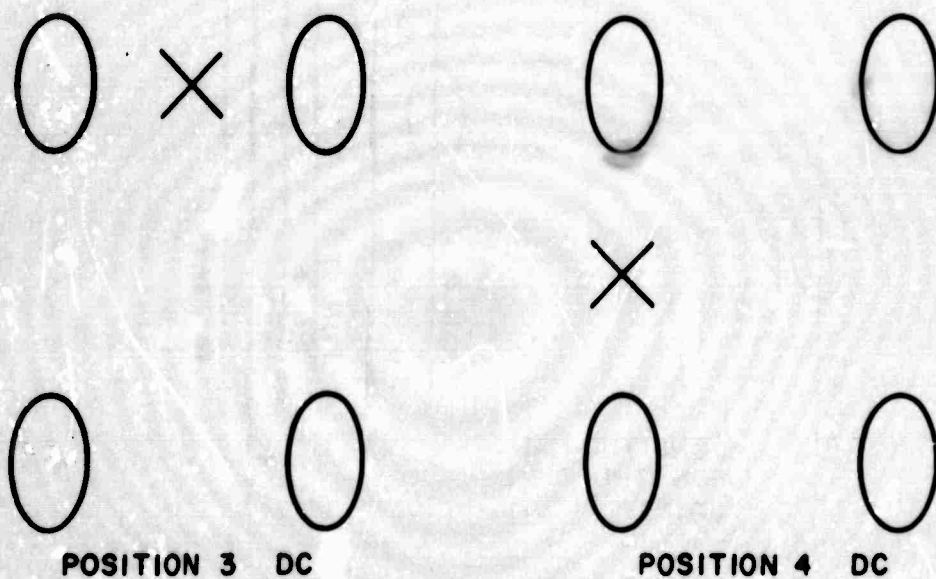
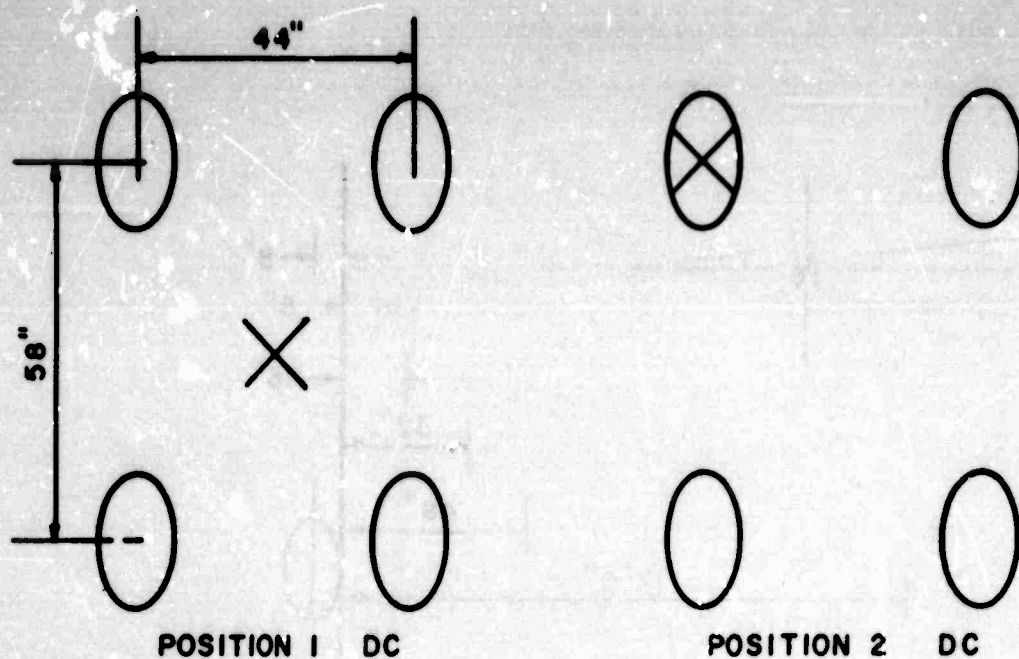
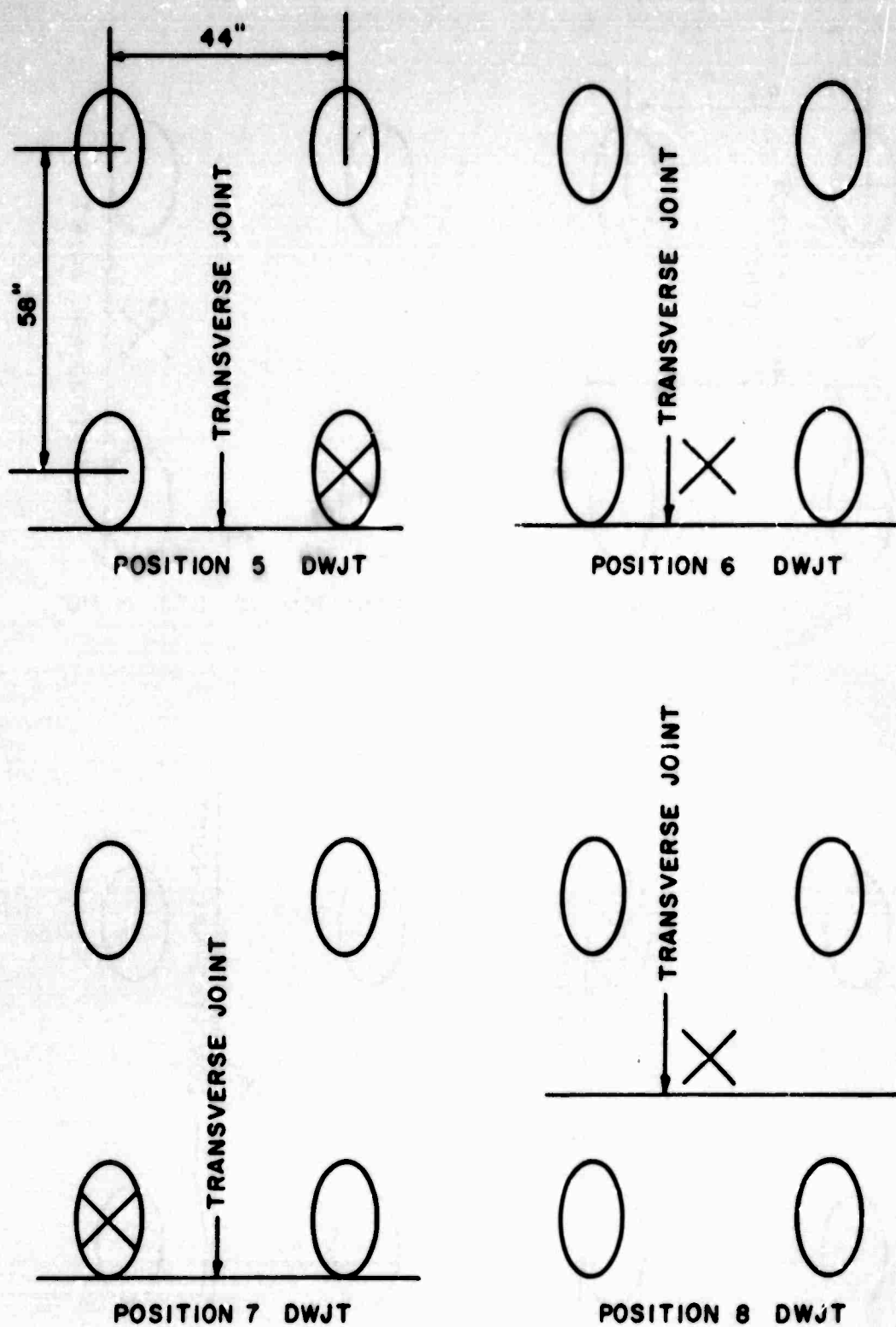


Figure B2. Wheel Positions for Single-Wheel Dynamic Load Tests on Rigid Pavement Test Section



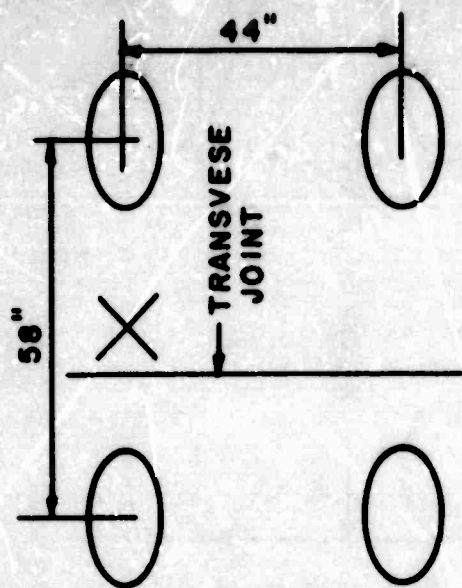
NOTE: X = CENTER DEFLECTION GAGE

Figure B3. Wheel Positions 1-4 for Twin-Tandem Static Load Tests, Rigid Pavement Test Section



NOTE: X = DEFLECTION GAGE DWJT

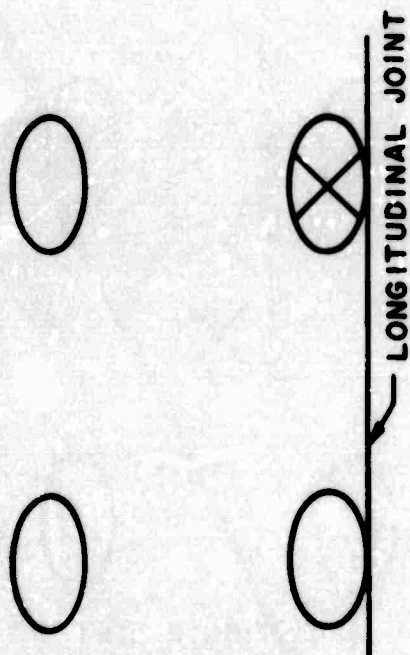
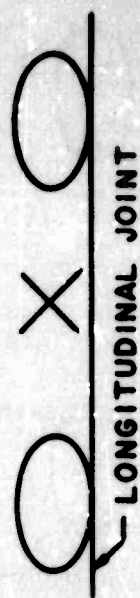
Figure B4. Wheel Positions 5-8 for Twin-Tandem Static Load Tests, Rigid Pavement Test Section



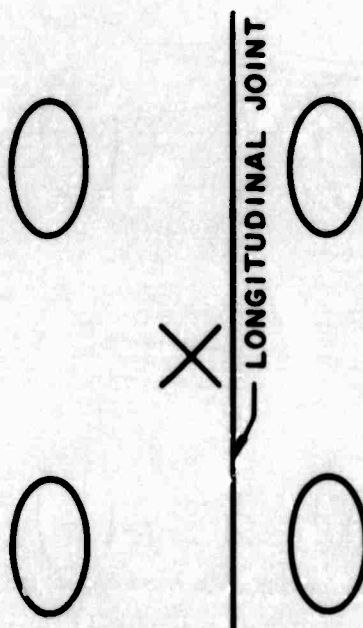
POSITION 9 DWJT



POSITION 10 DSJL or PD



POSITION 11 DSJL



POSITION 12 DSJL

NOTE: X = DEFLECTION GAGE

Figure B5. Wheel Positions 9-12 for Twin-Tandem Static Load Tests, Rigid Pavement Test Section

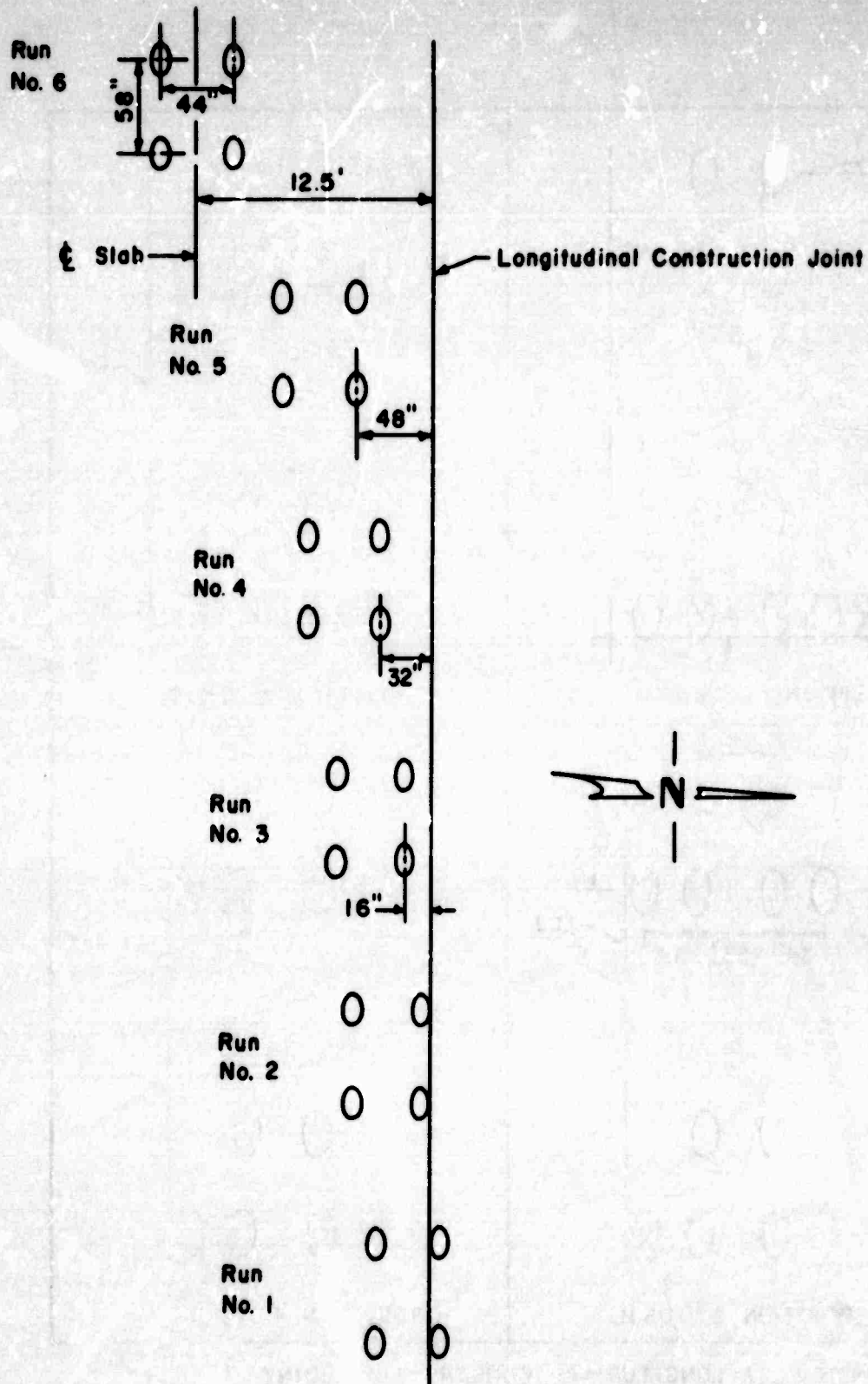
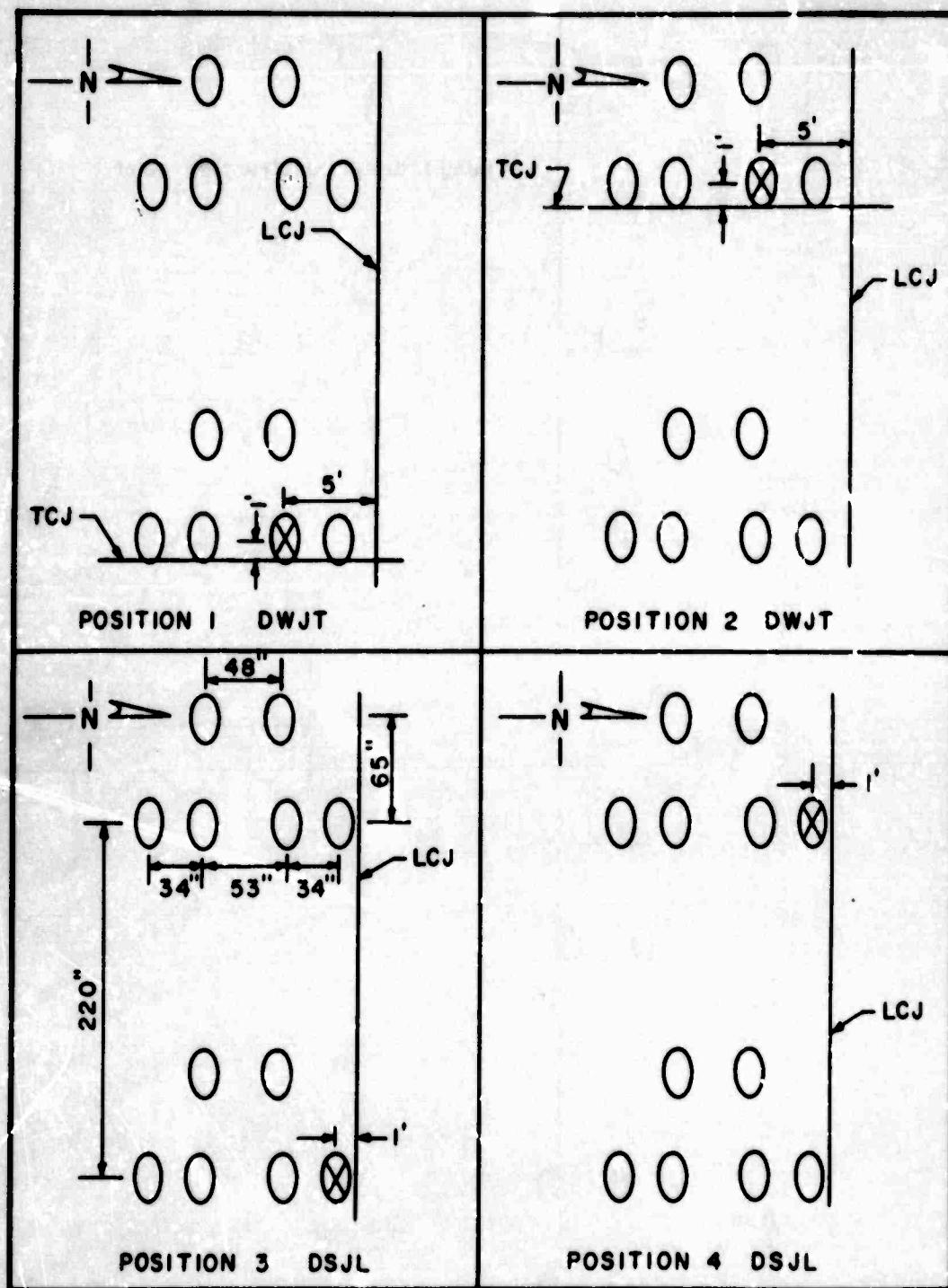
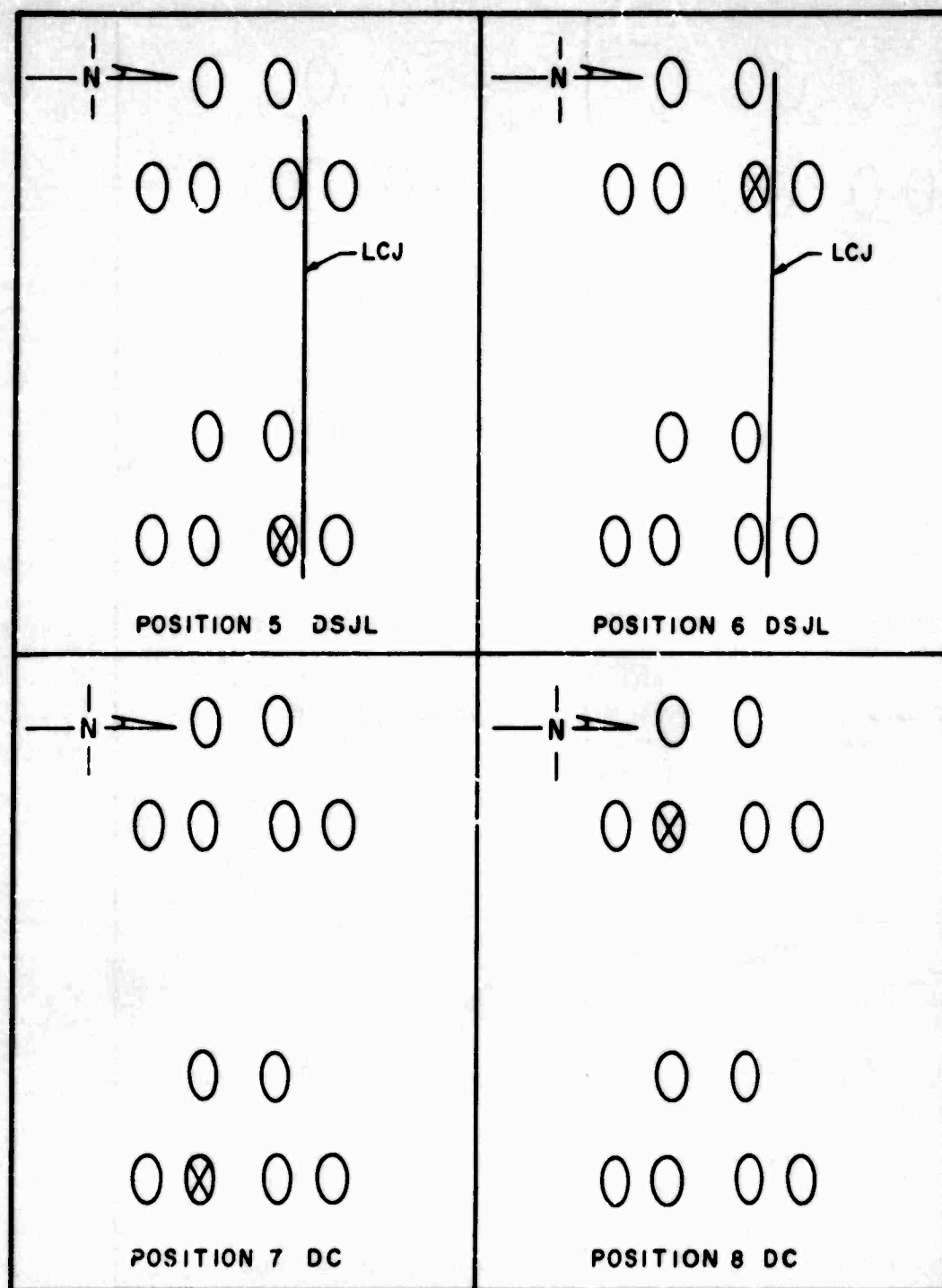


Figure B6. Wheel Positions for Twin-Tandem Dynamic Load Tests on Rigid Pavement Test Section



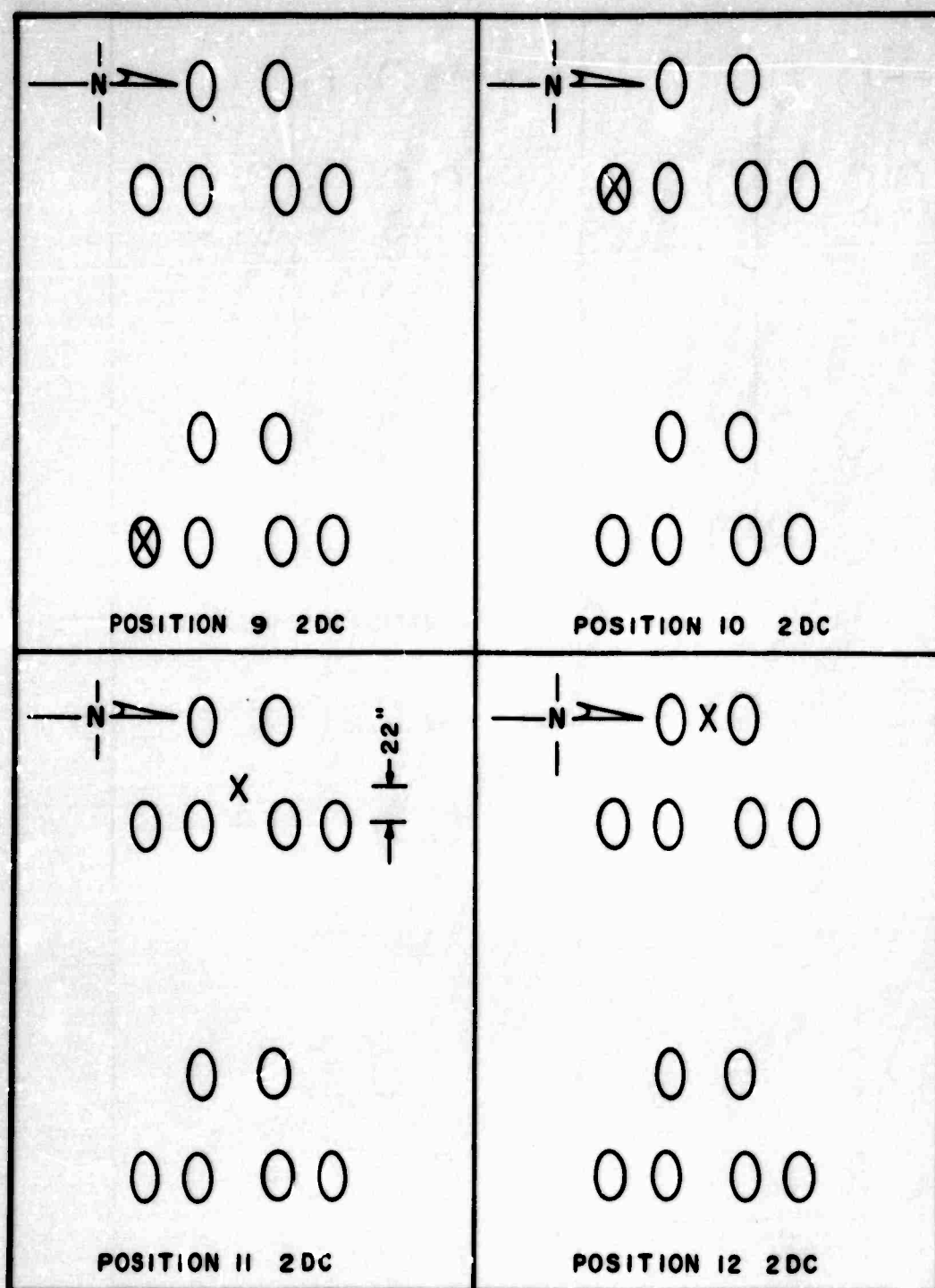
NOTE: LCJ = LONGITUDINAL CONSTRUCTION JOINT
 TCJ = TRANSVERSE CONTRACTION JOINT
 X = DEFLECTION GAGE

Figure B7. Wheel Positions 1-4 for 12-Wheel Static Load Tests, Rigid Pavement Test Section



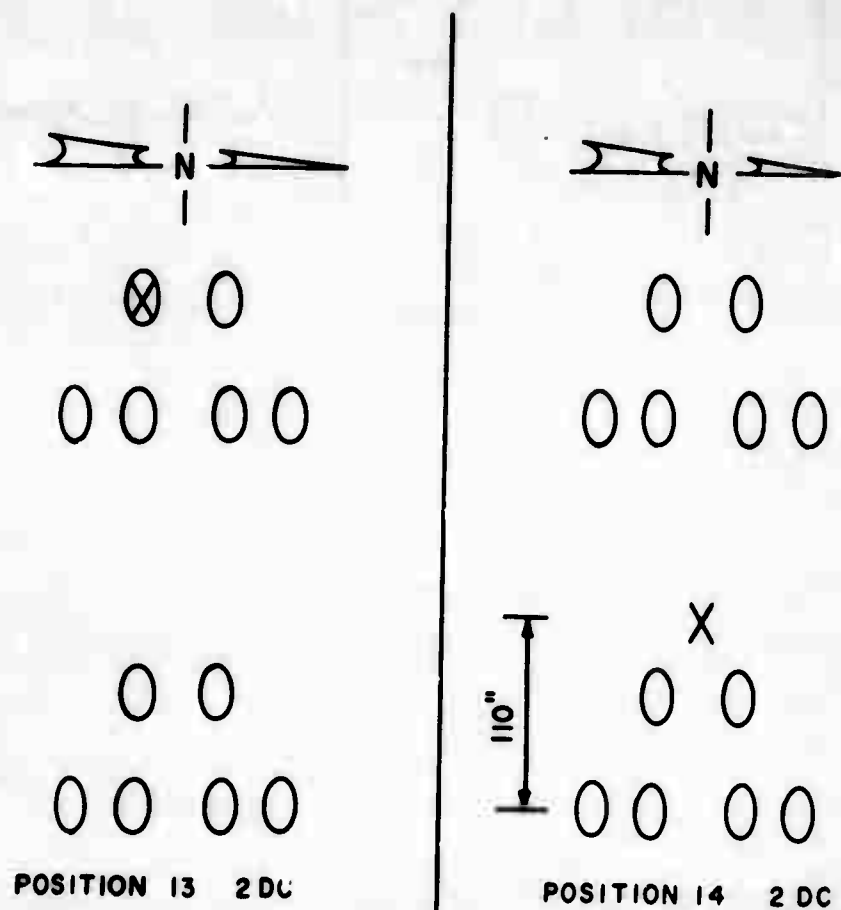
NOTE : LCJ = LONGITUDINAL CONSTRUCTION JOINT
X = DEFLECTION GAGE

Figure B8. Wheel Positions 5-8 for 12-Wheel Static Load Tests, Rigid Pavement Test Section



NOTE: X = DEFLECTION GAGE

Figure B9. Wheel Positions 9-12 for 12-Wheel Static Load Tests, Rigid Pavement Test Section



NOTE: X = DEFLECTION GAGE

Figure B10. Wheel Positions 13 and 14 for 12-Wheel Static Load Tests, Rigid Pavement Test Section

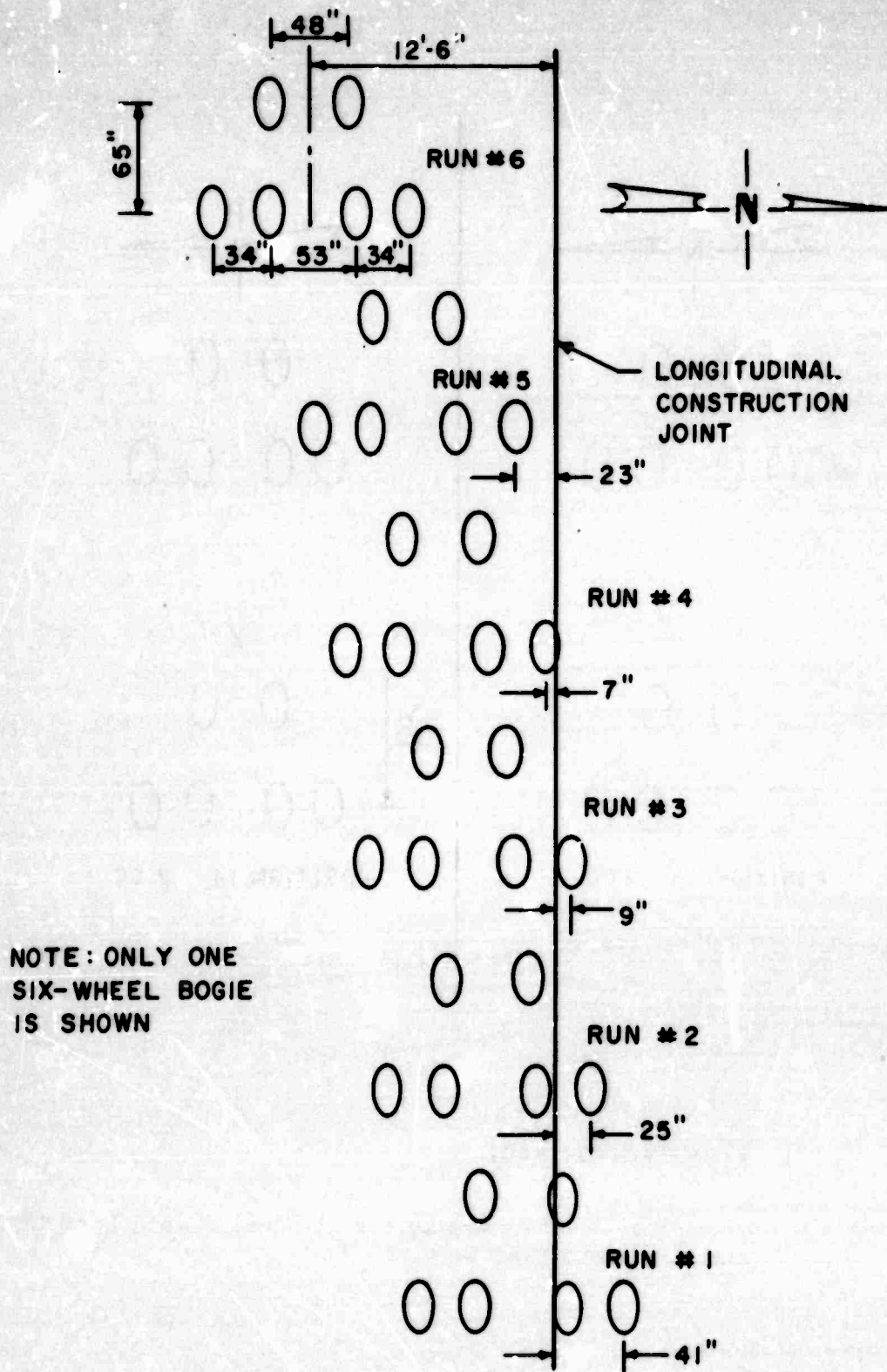


Figure B11. Wheel Positions for 6- and 12-Wheel Dynamic Load Tests on Rigid Pavement Test Section (Wheel Positions Were the Same for Both)

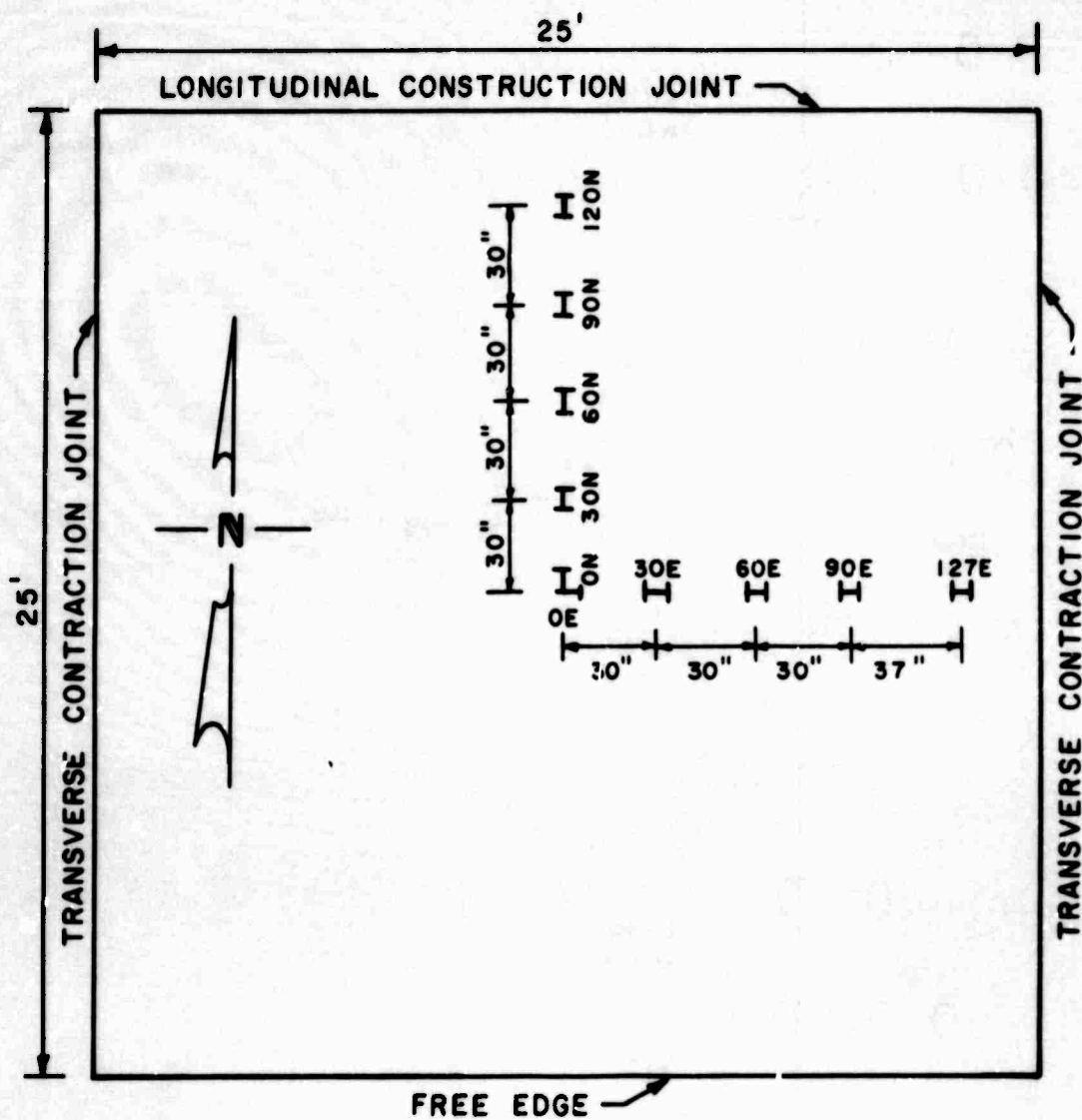


Figure B12. Supplemental Strain Gage Layout, Test Item 2

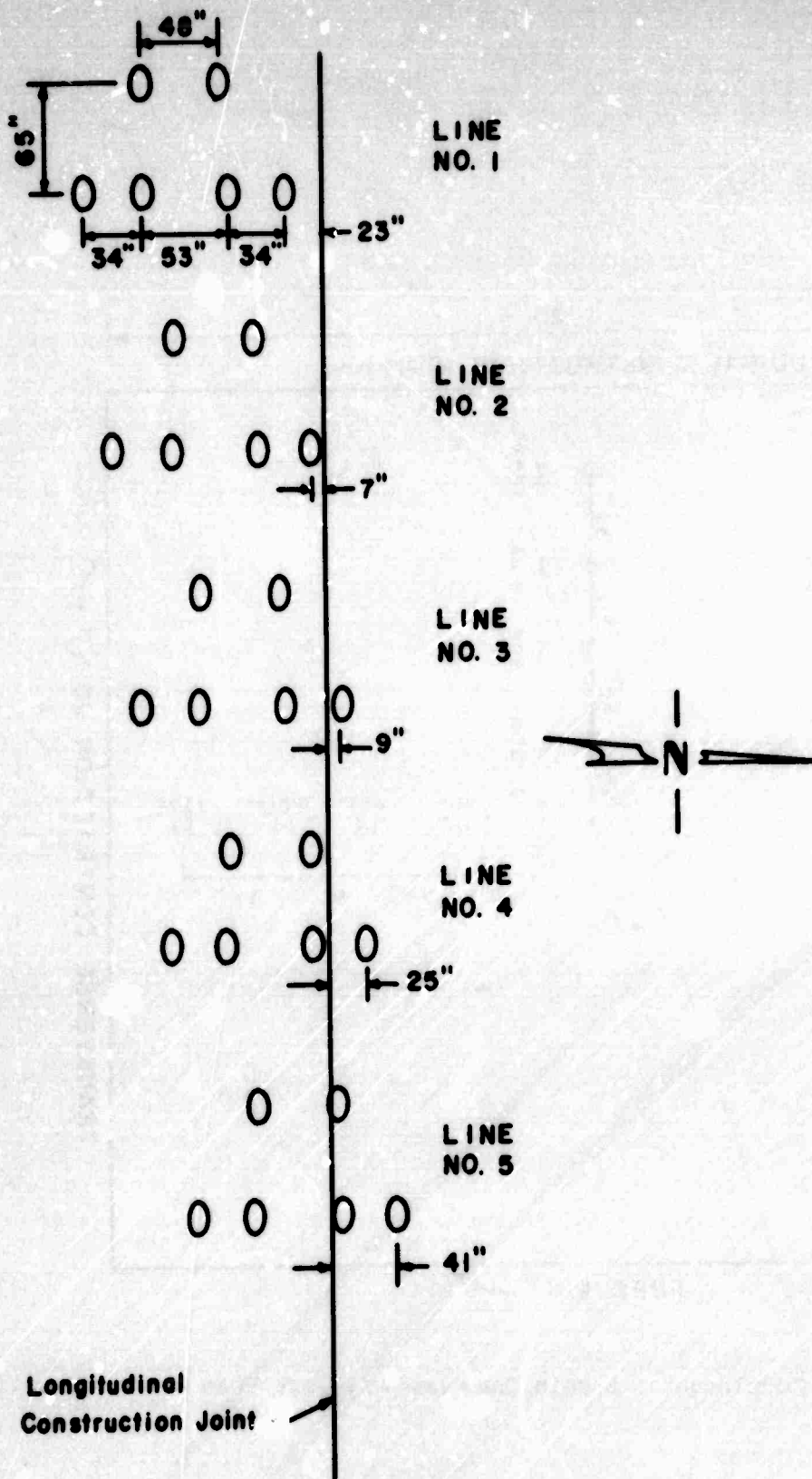


Figure B13. Traffic Patterns for the 12-Wheel Assembly, Rigid Pavement Test Section

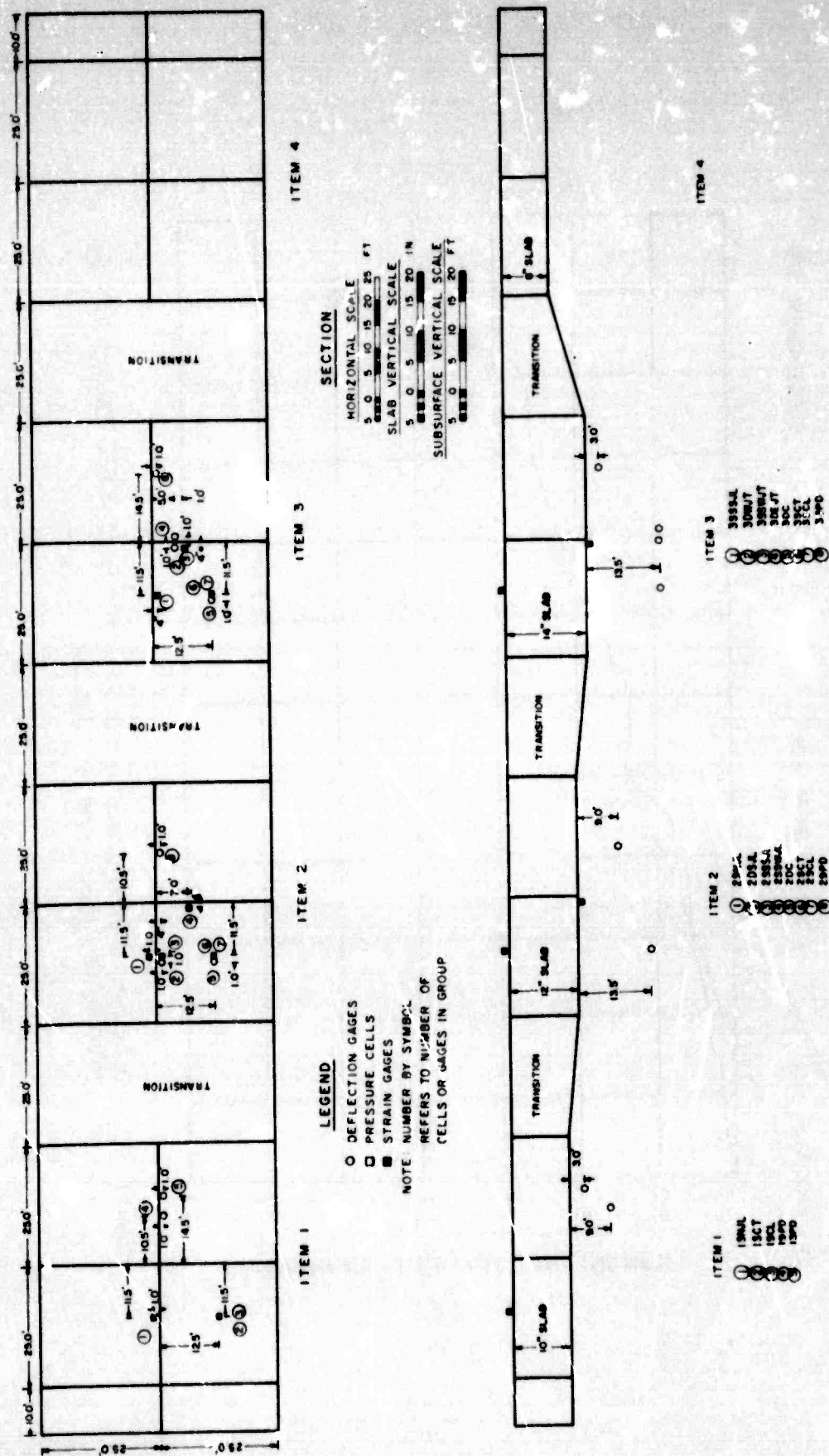


Figure B14. Instrumentation Layout at Start of 12-Wheel Traffic, Rigid Pavement Test Section

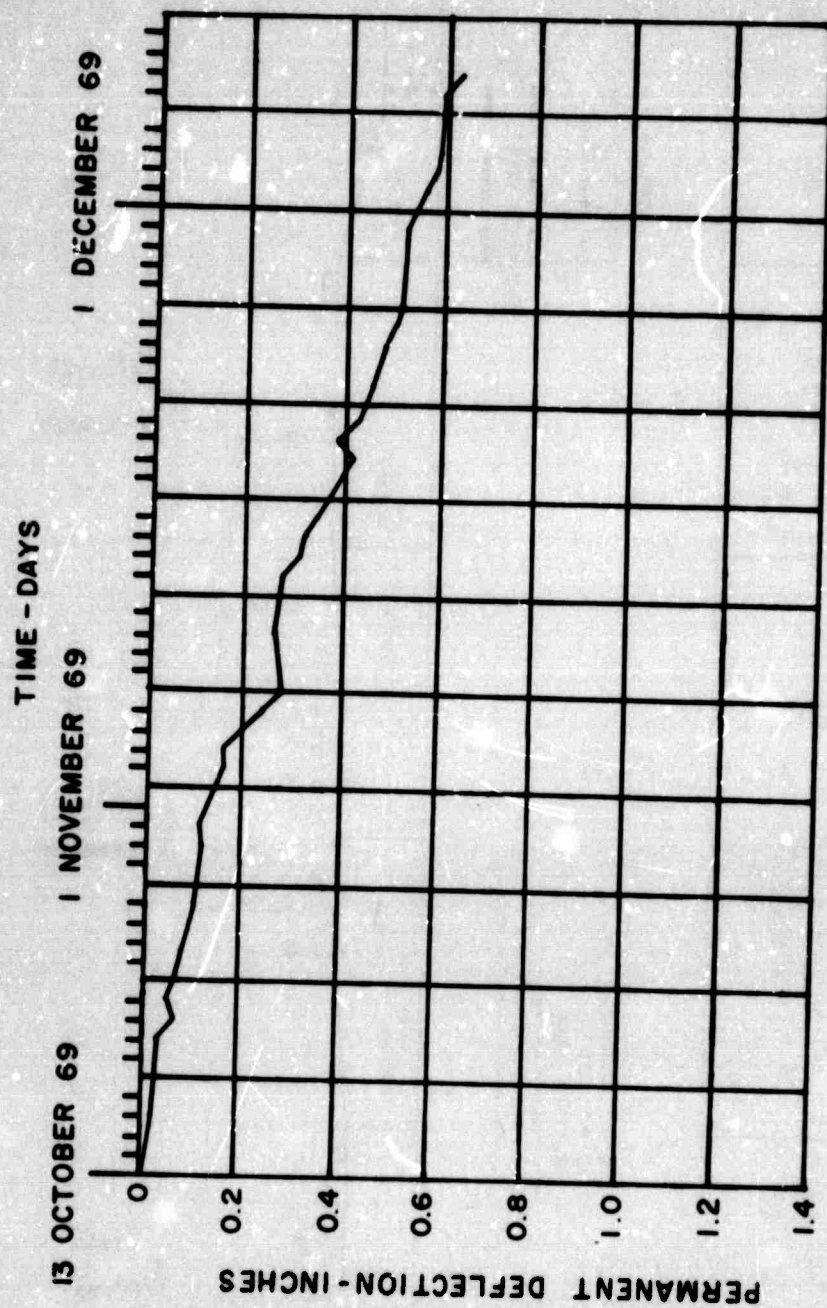


Figure B15. Permanent Deflection Versus Days for Gage 2DSJL During 360-kip 12-Wheel-Assembly Traffic Testing

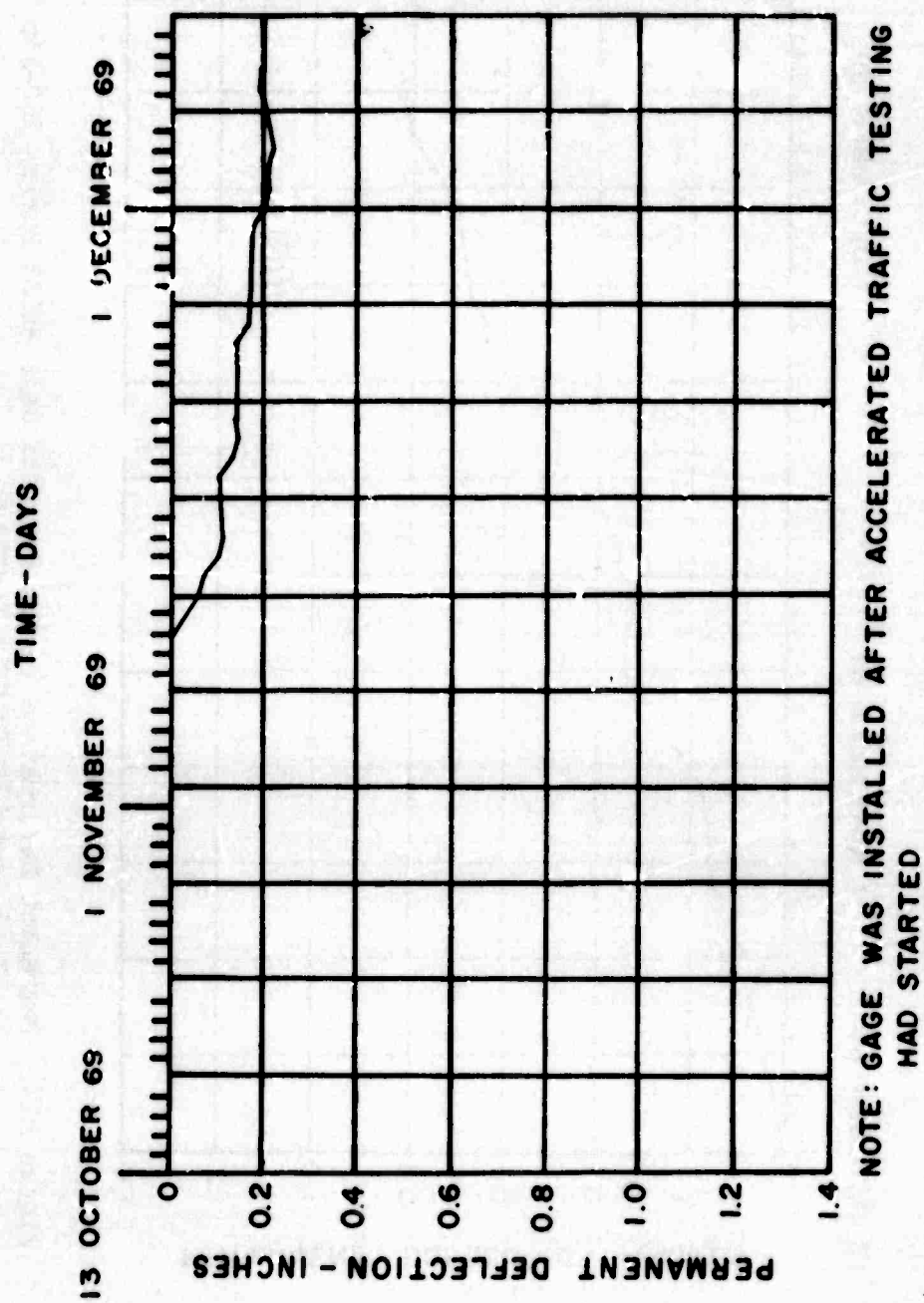


Figure B16. Permanent Deformation Versus Days for Gage 2DC During 360-Hip
12-Wheel-Assembly Traffic Testing

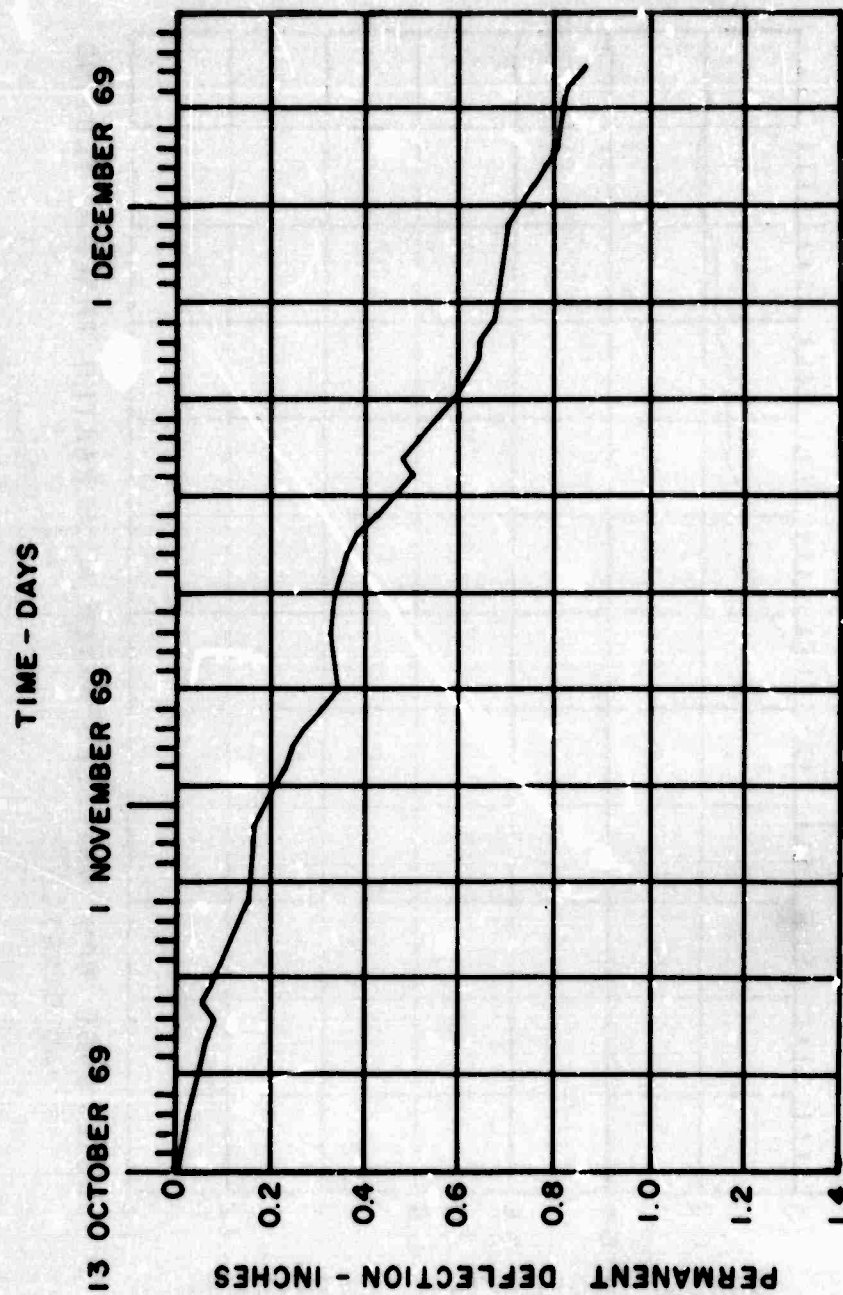


Figure B17. Permanent Deformation Versus Days for Gage 3DEJT During 360-kip 12-Wheel-Assembly Traffic Testing

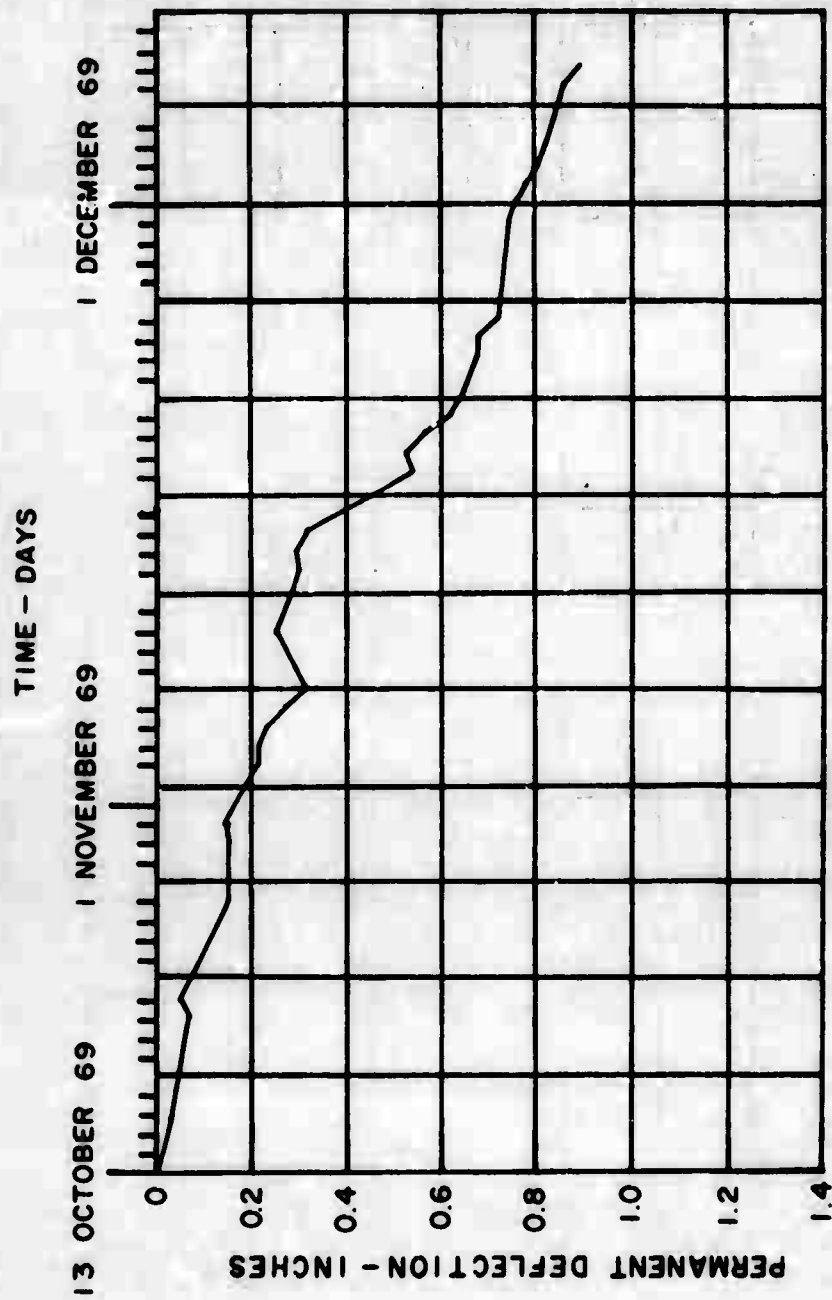


Figure B18. Permanent Deformation Versus Days for Gage 3DWJT During 360-kip 12-Wheel-Assembly Traffic Testing

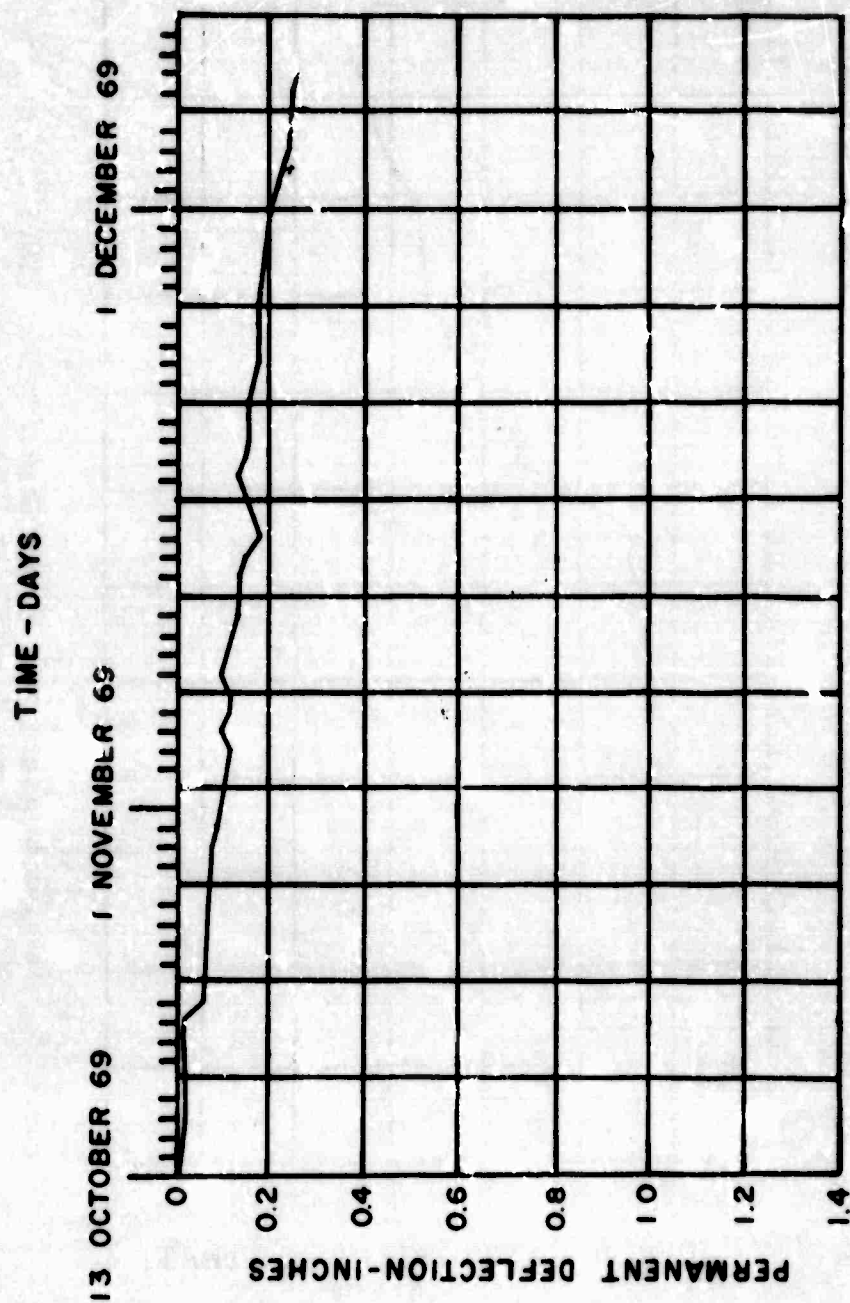


Figure B19. Permanent Deformation Versus Days for Gage 3DC During 360-kip 12-Wheel-Assembly Traffic Testing

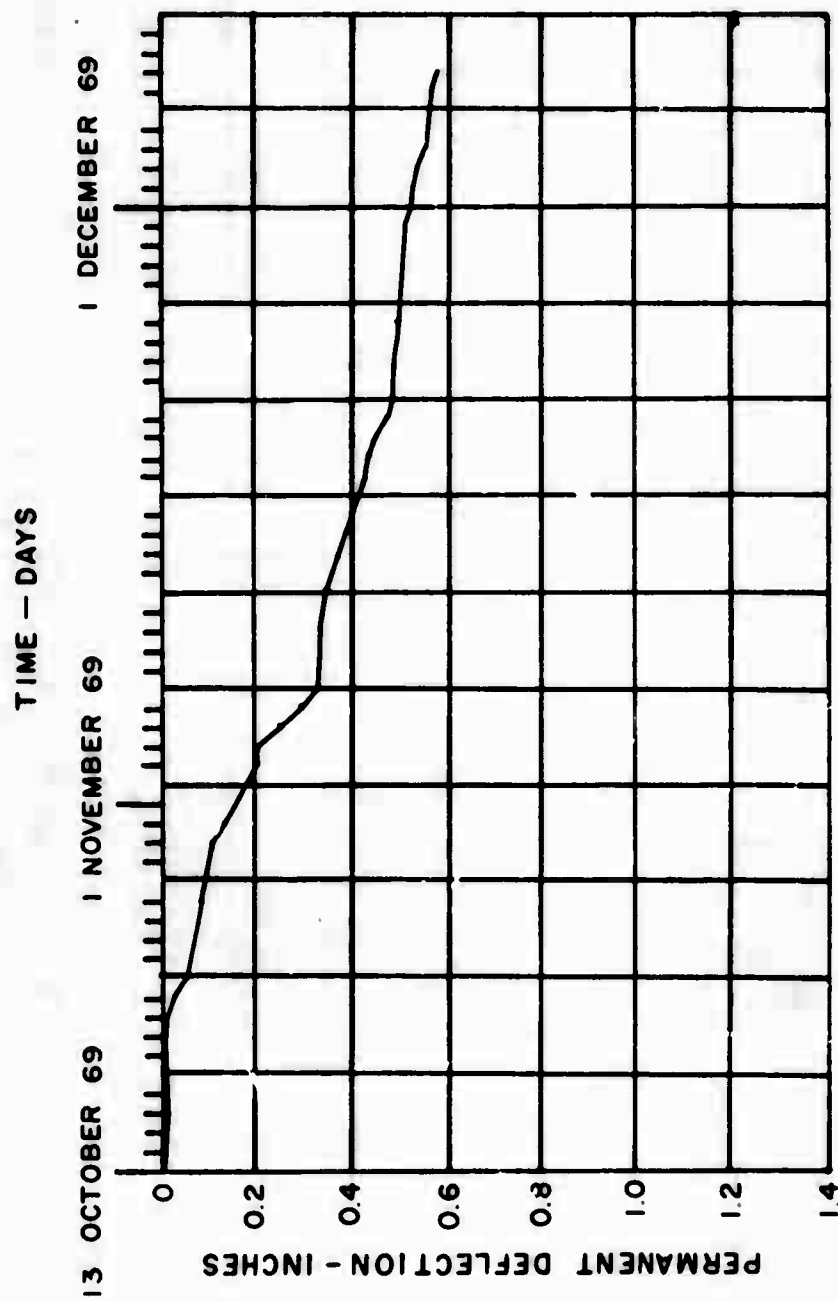


Figure B20. Permanent Deformation Versus Days for Gage 13PD During 360-kip 12-Wheel-Assembly Traffic Testing

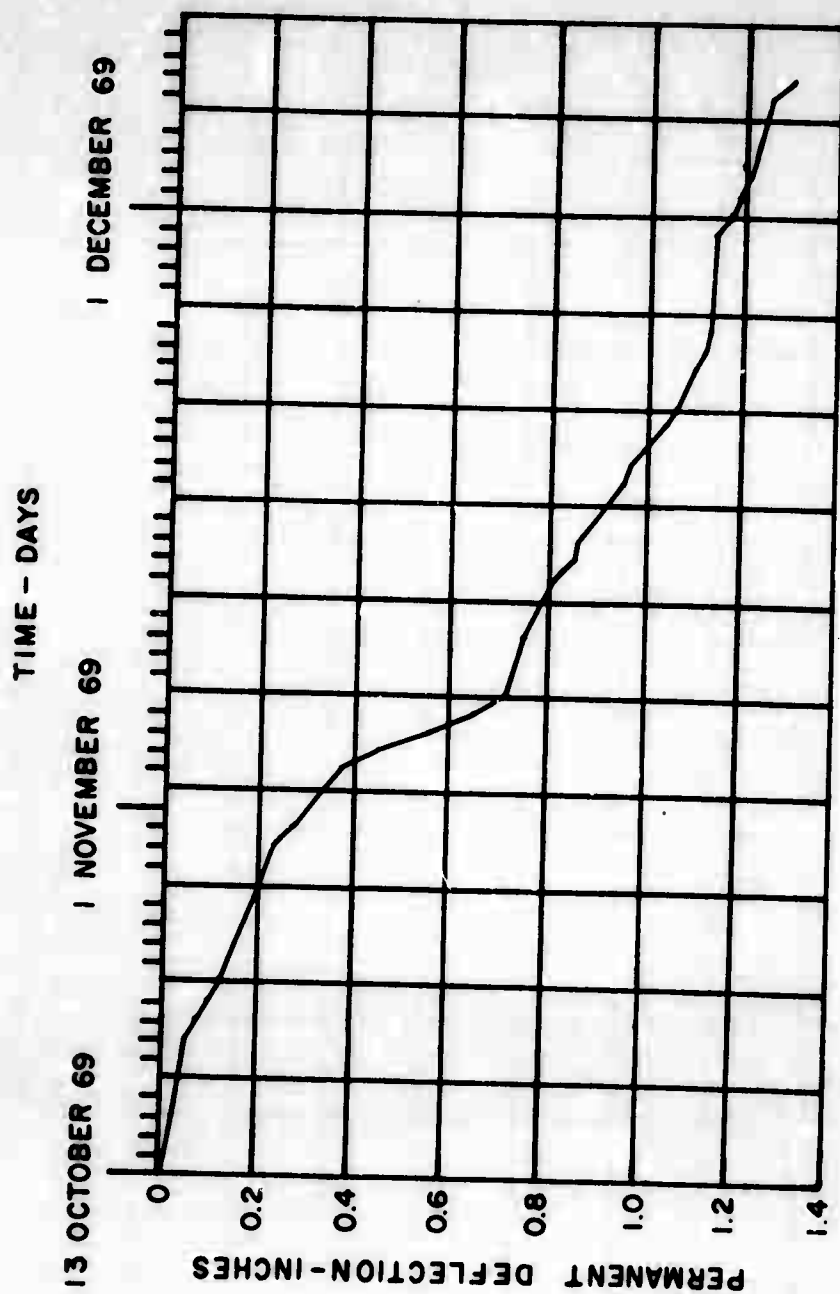


Figure B21. Permanent Deformation Versus Days for Gage 19FD During 360-kip 12-Wheel-Assembly Traffic Testing

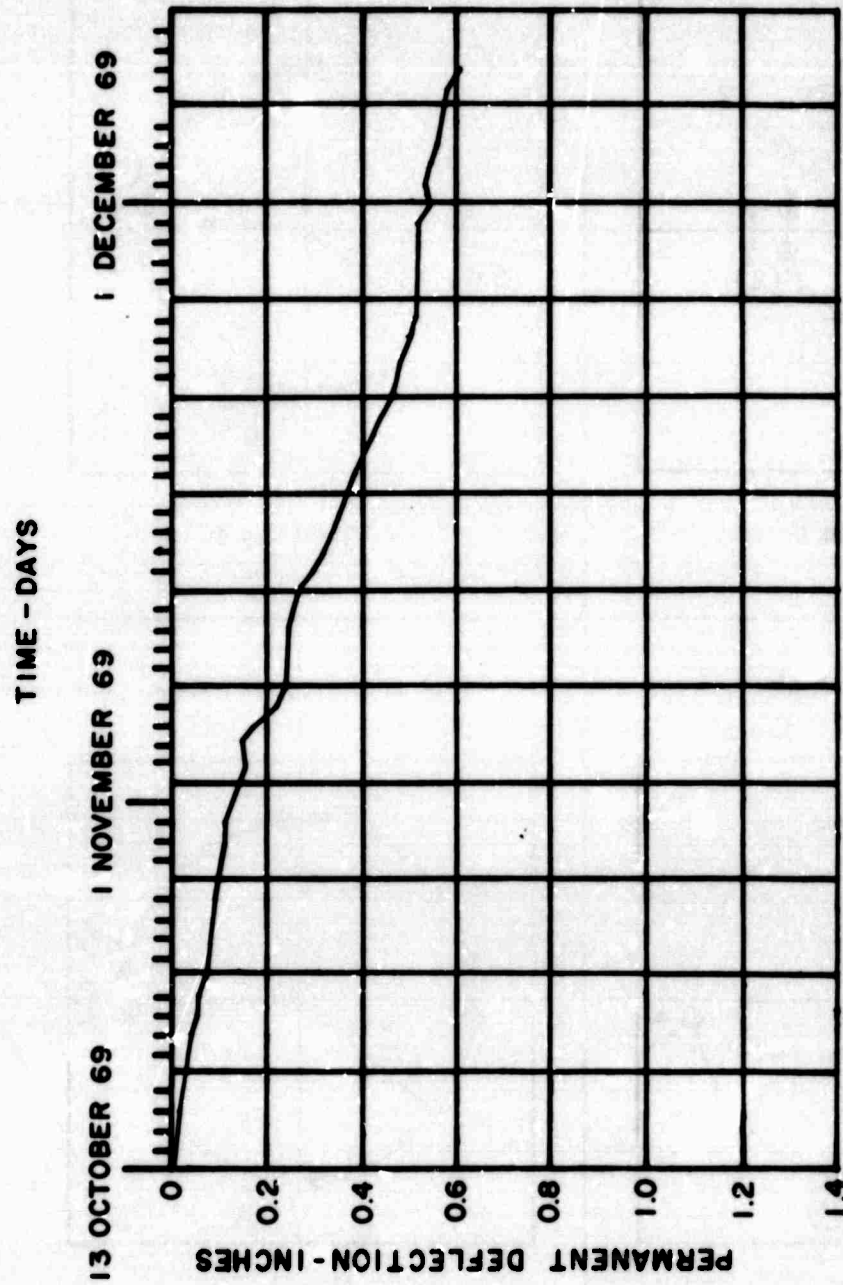
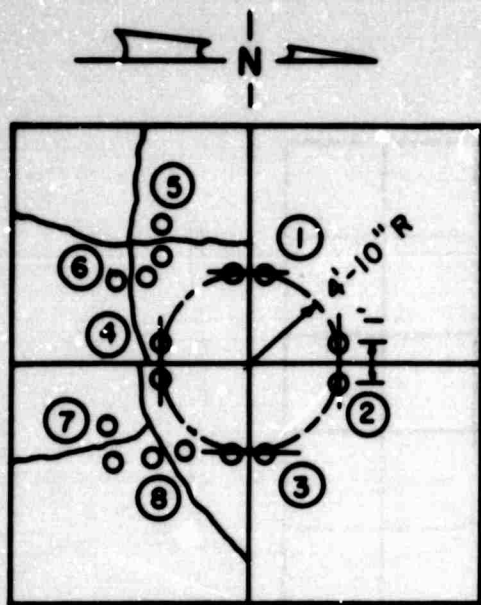
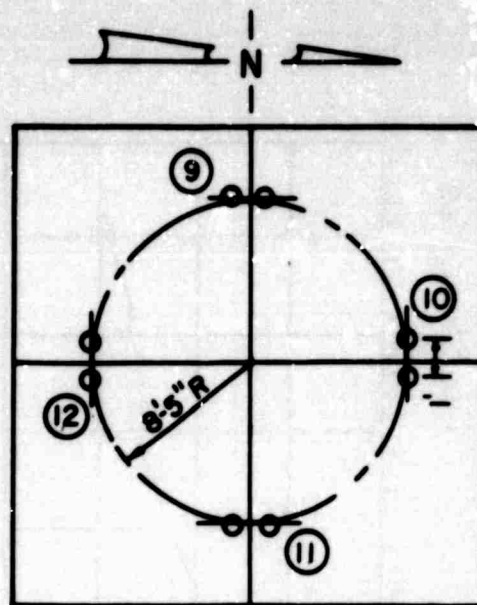


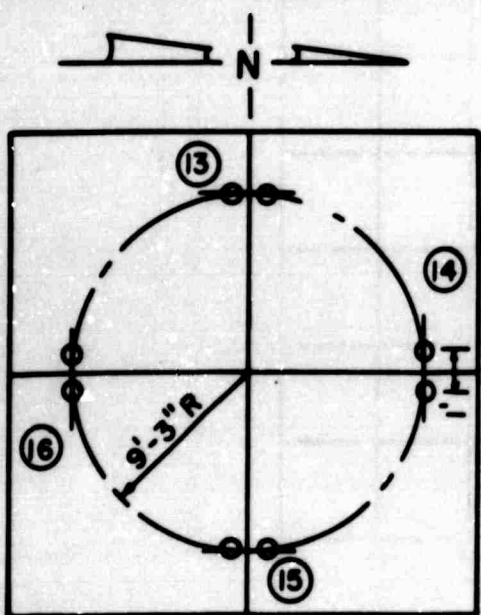
Figure B22. Permanent Deflection Versus Days for Gage 29FD During 360-kip 12-Wheel-Assembly Traffic Testing



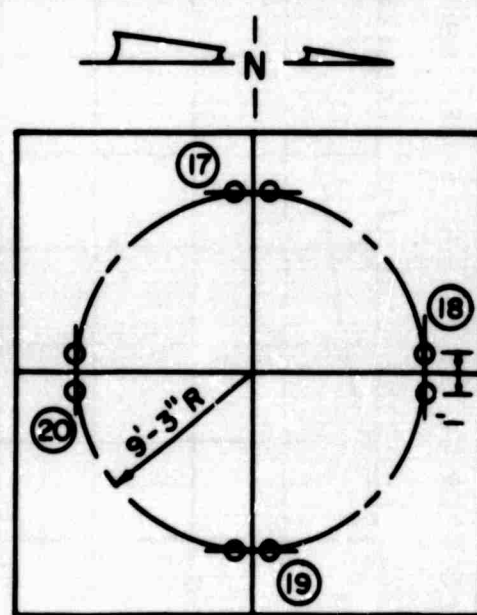
ITEM #1



ITEM #2



ITEM #3



ITEM #4

Figure B23. Whittemore Gage Locations

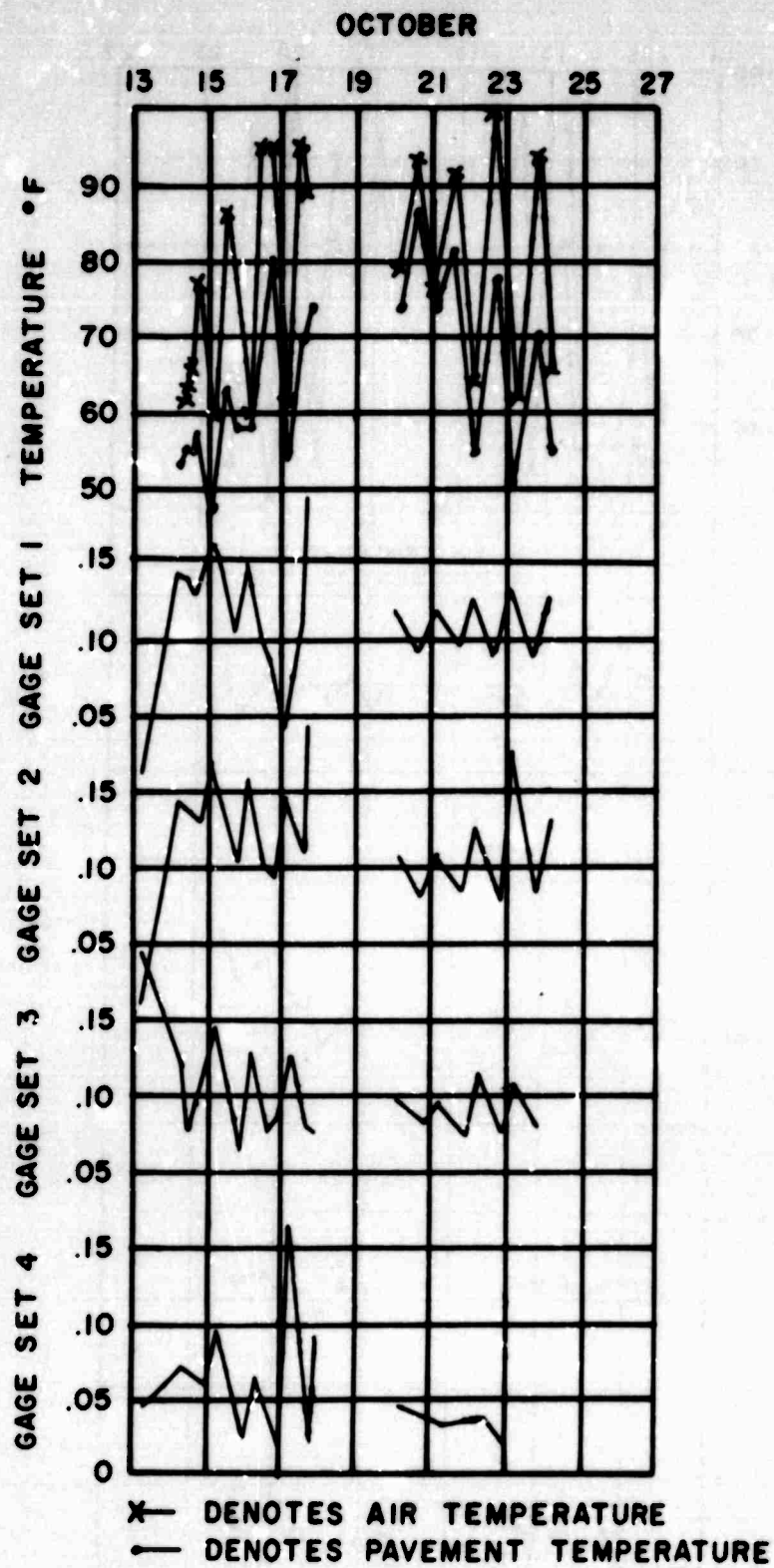


Figure B24. Test Item 1: Temperature and Whittemore Gage Readings Versus Days, Gages 1-4

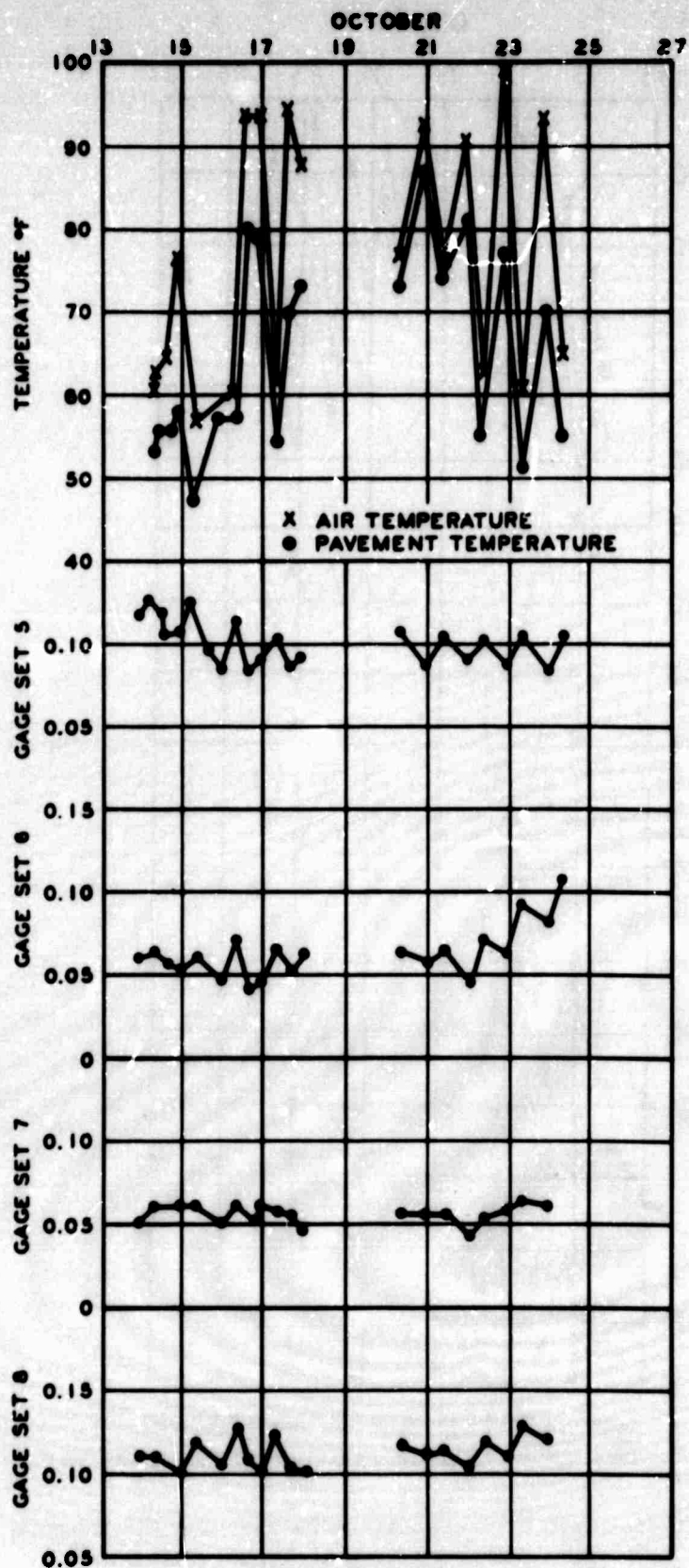


Figure B25. Test Item 1: Temperature and Whittemore Gage Readings Versus Days, Gages 5-8

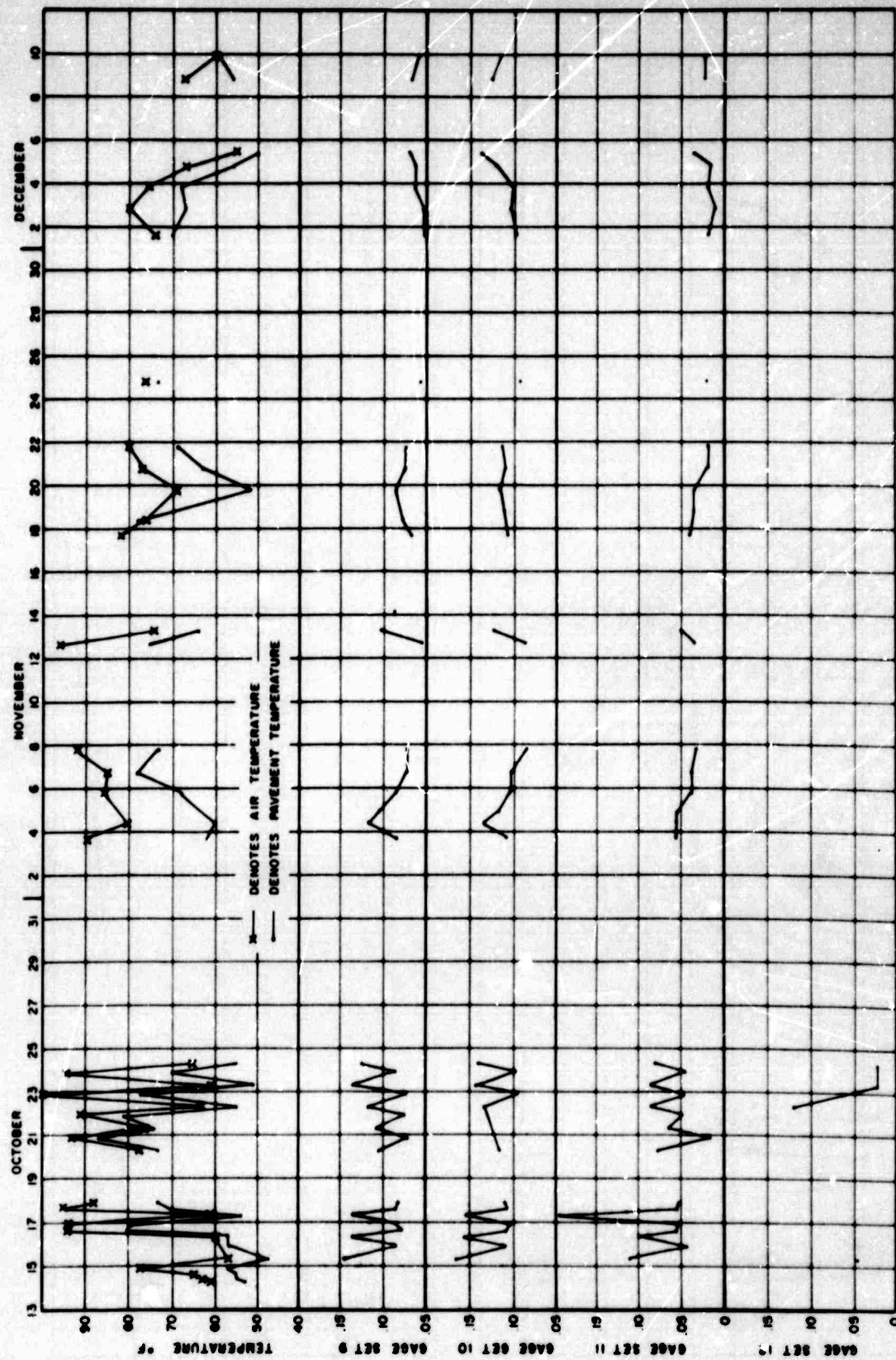


Figure B26. Test Item 2: Temperature and Whittetore Gage Readings Versus Days, Gages 9-12

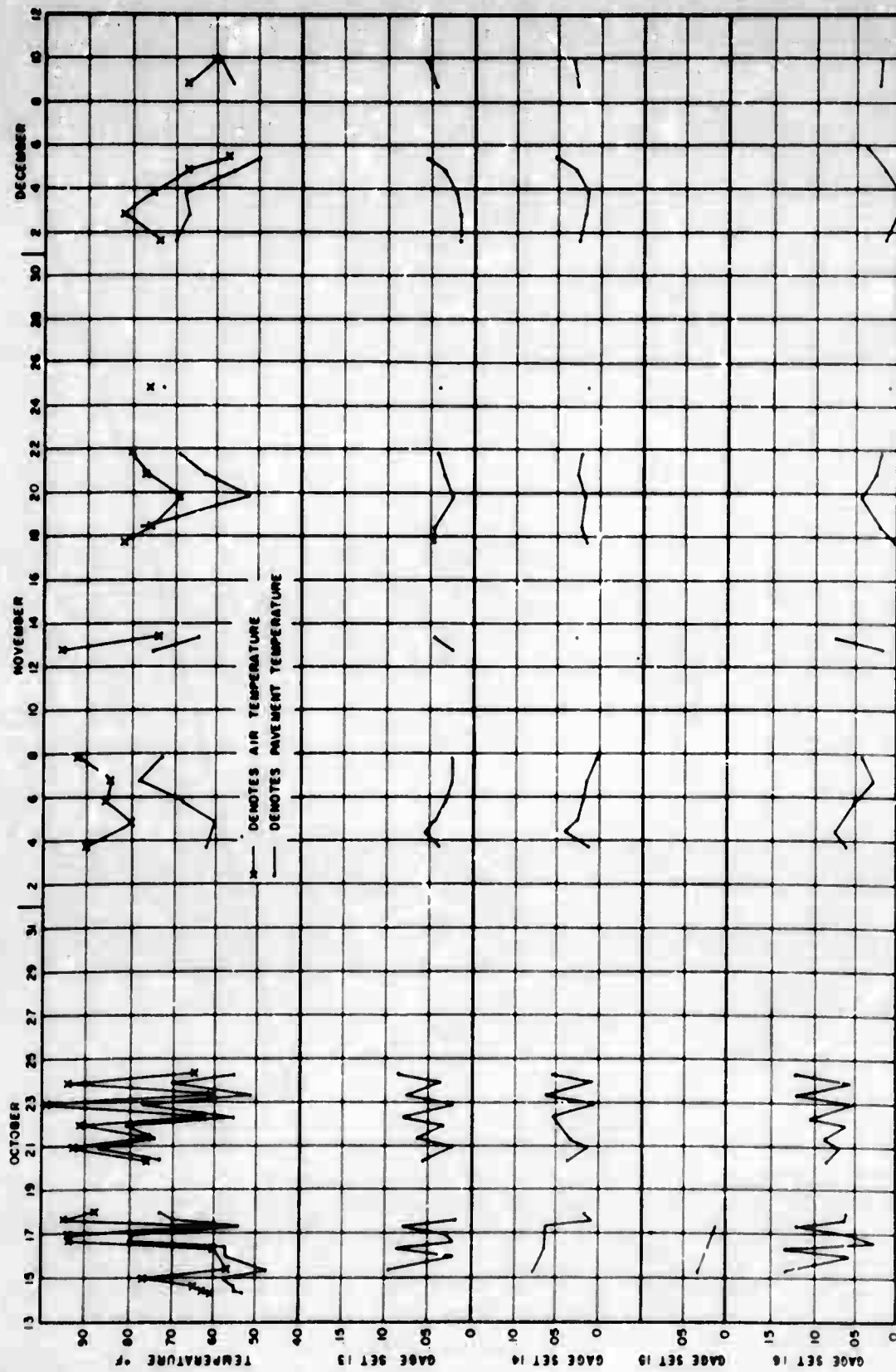


Figure B27. Test Item 3: Temperature and Whittemore Gage Readings Versus Days, Gages 13-16

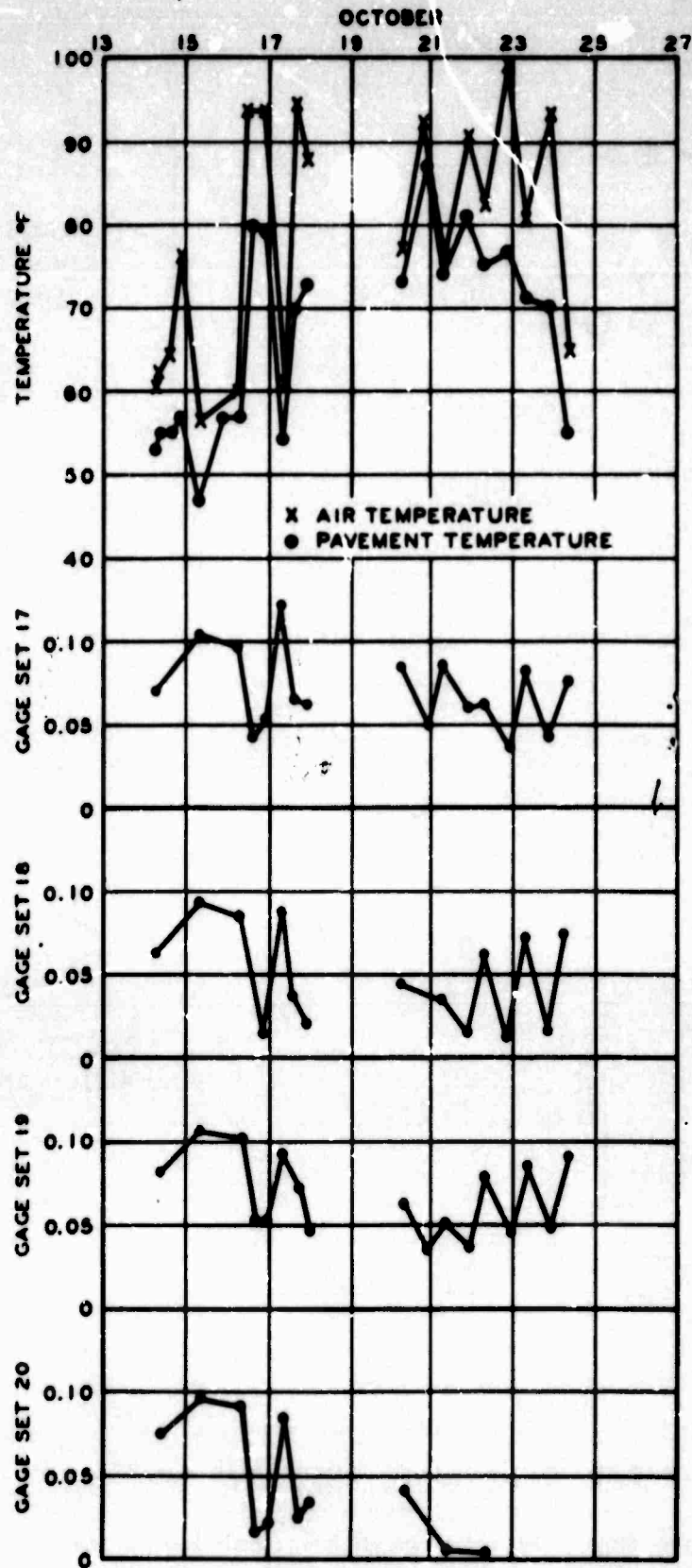
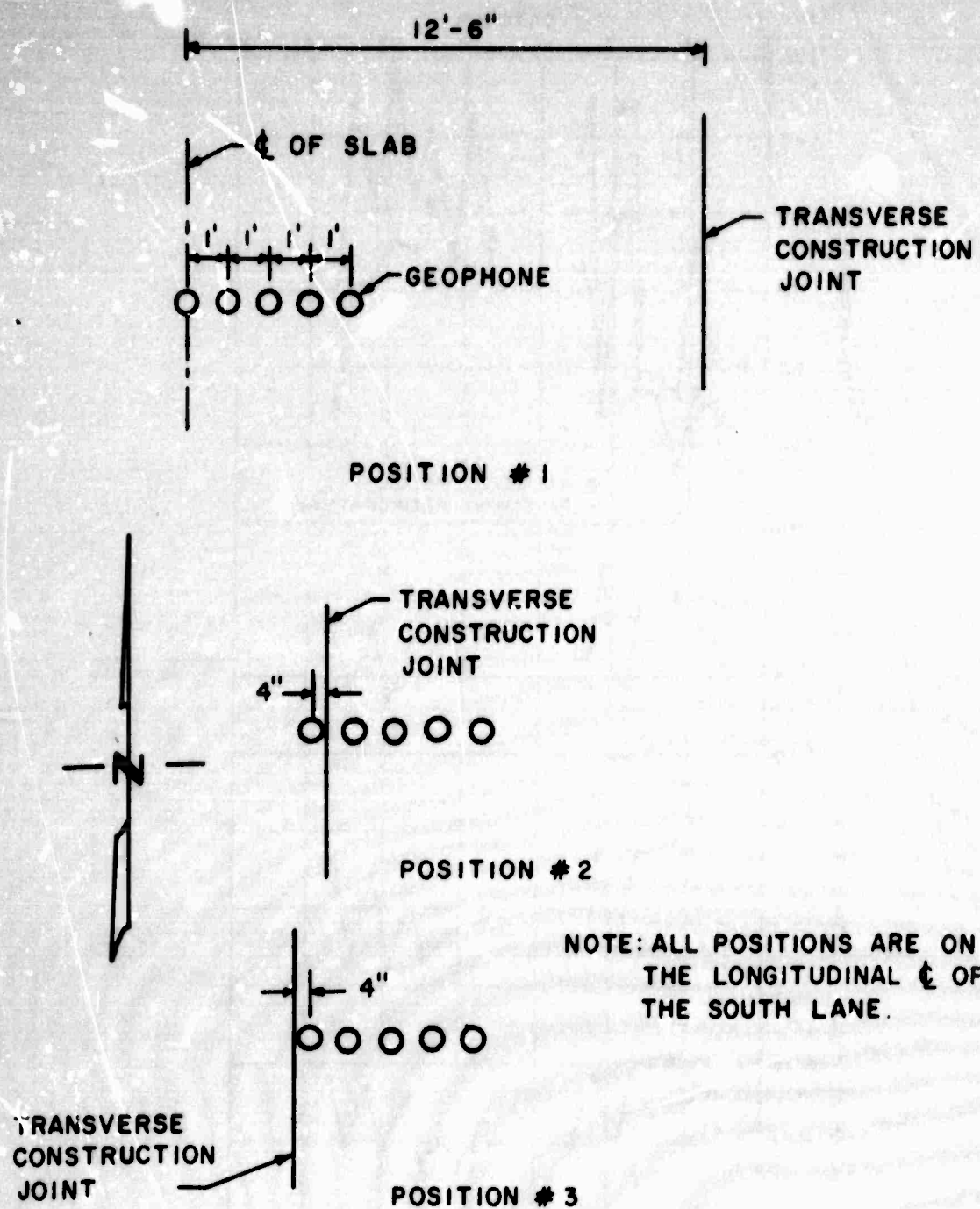


Figure B28. Test Item 4: Temperature and Whittemore Gage Readings Versus Days, Gages 17-20



TYPICAL DYNAFLECT TEST POSITIONS

Figure B29. Typical Dynaflect Test Positions

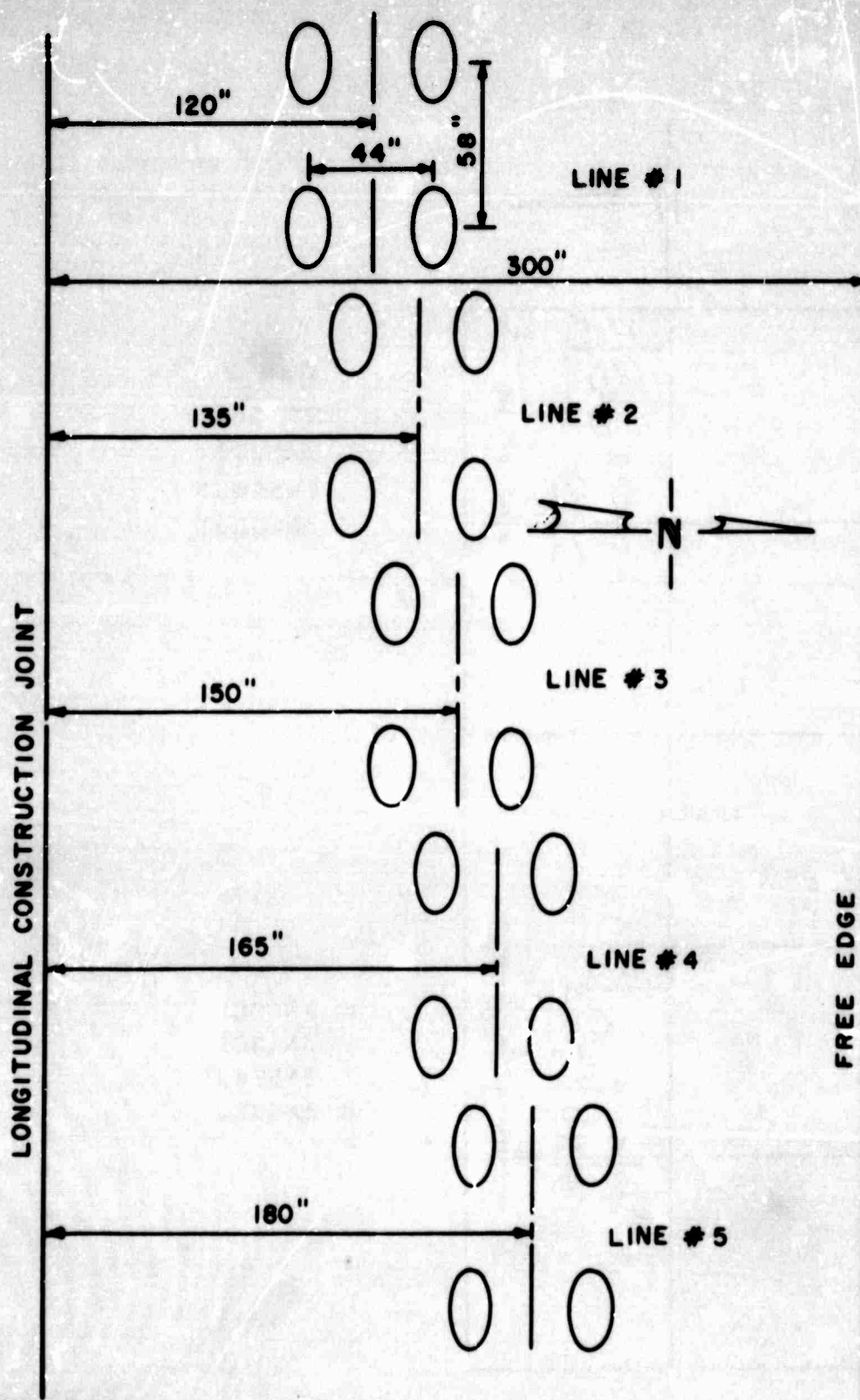


Figure B30. Instrumentation Layout for Twin-Tander Traffic Testing

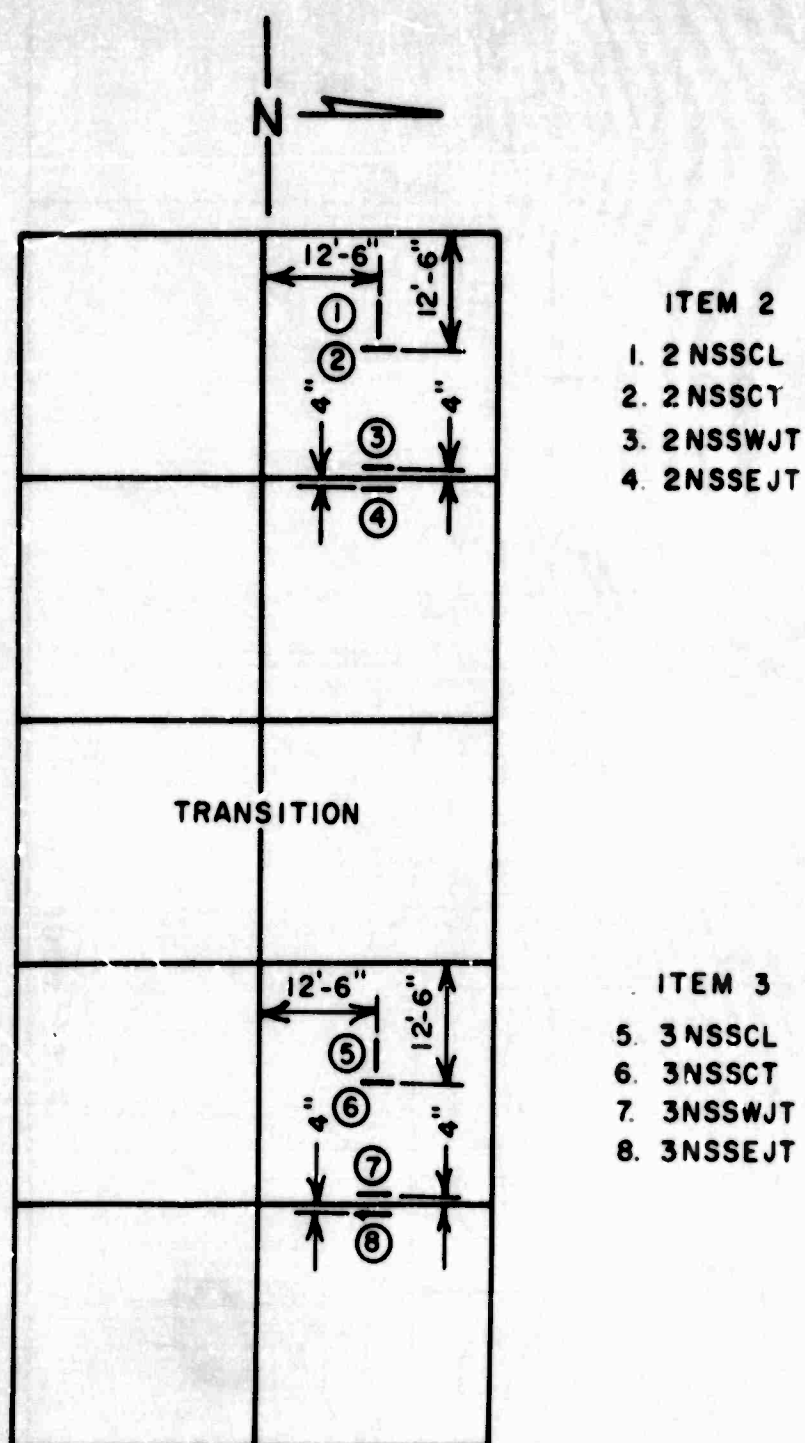


Figure B31. Traffic Patterns for the Twin-Tandem Assembly, Rigid Pavement Test Section

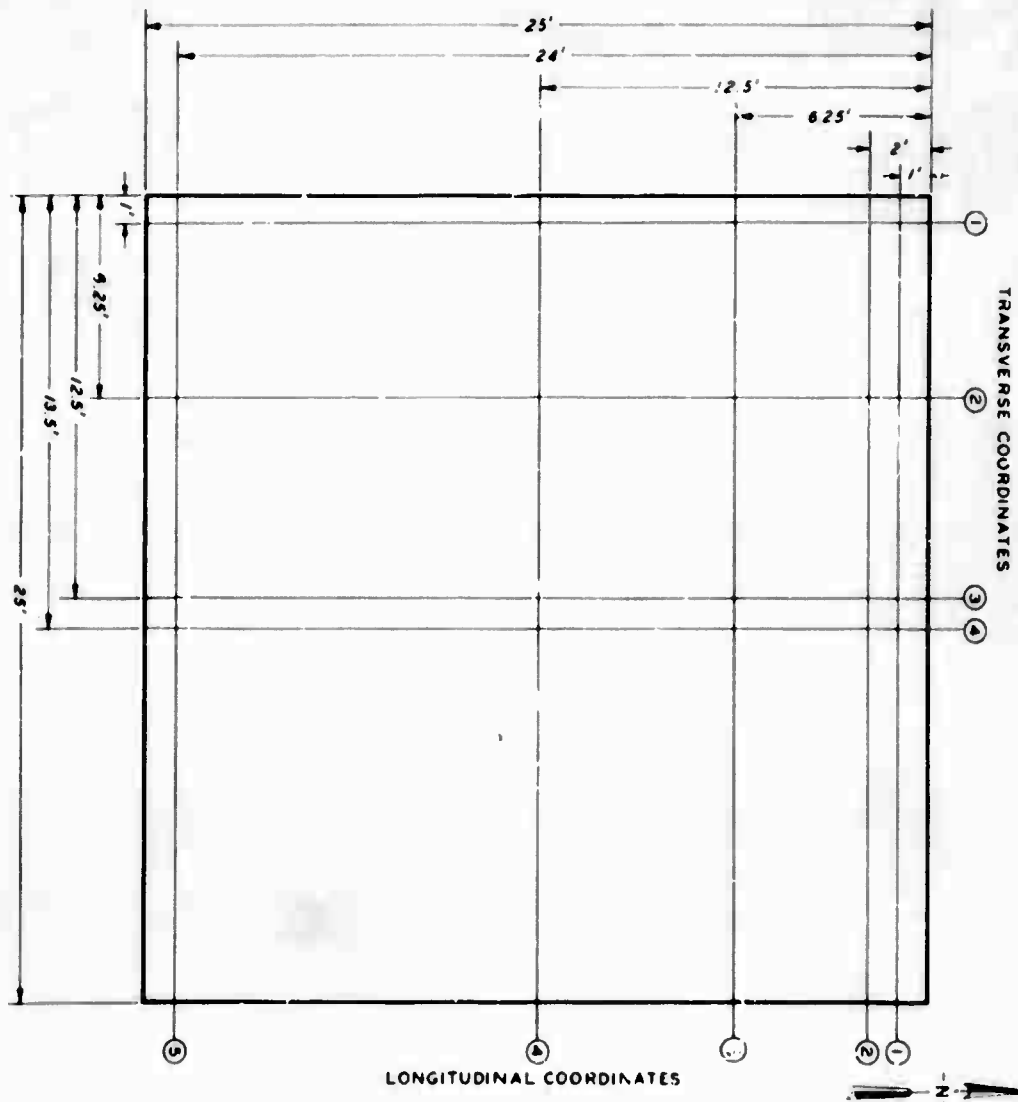
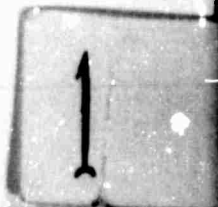
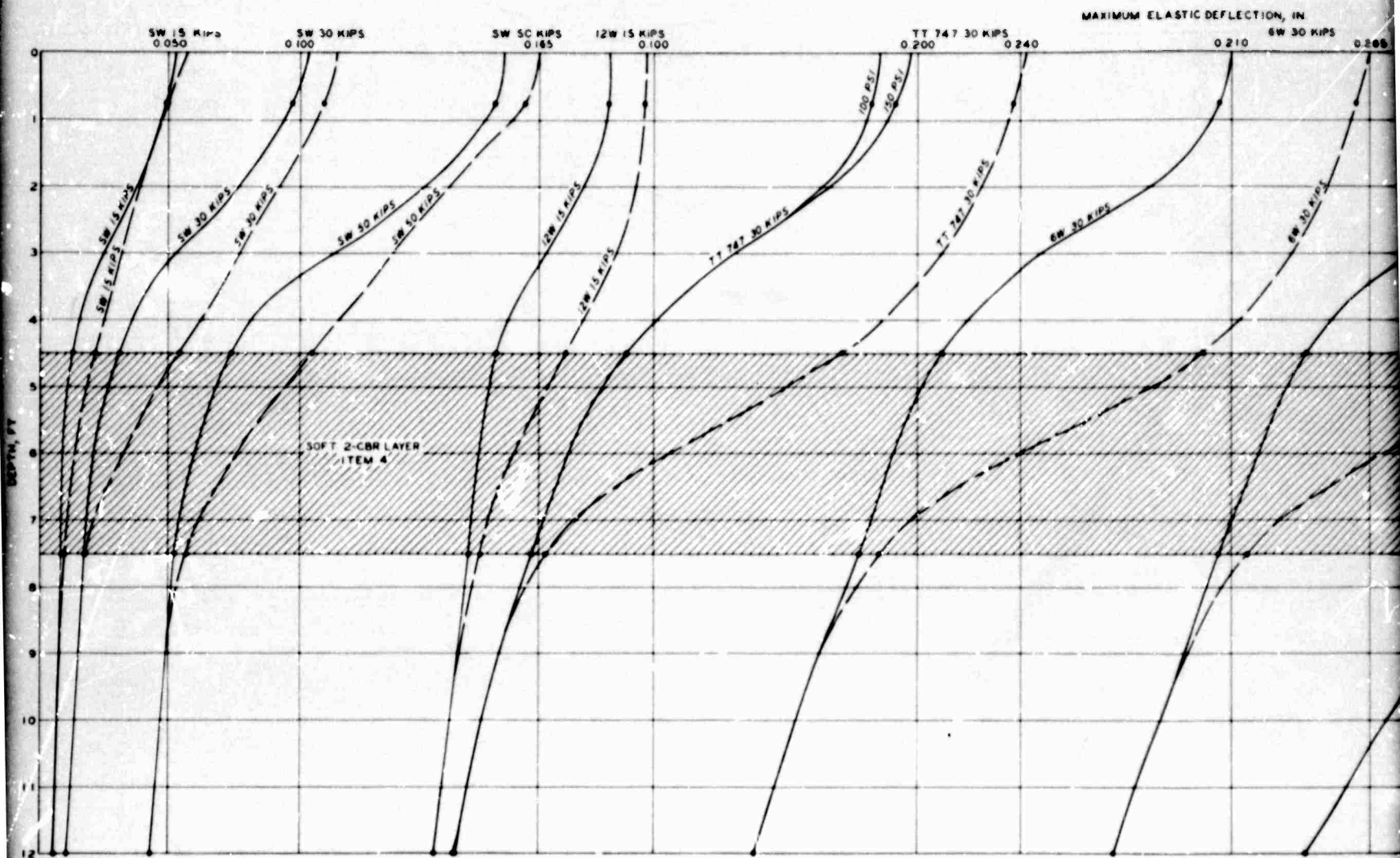


Figure B32. Locations of Pressure Cells, Item 2, Southeast Slab

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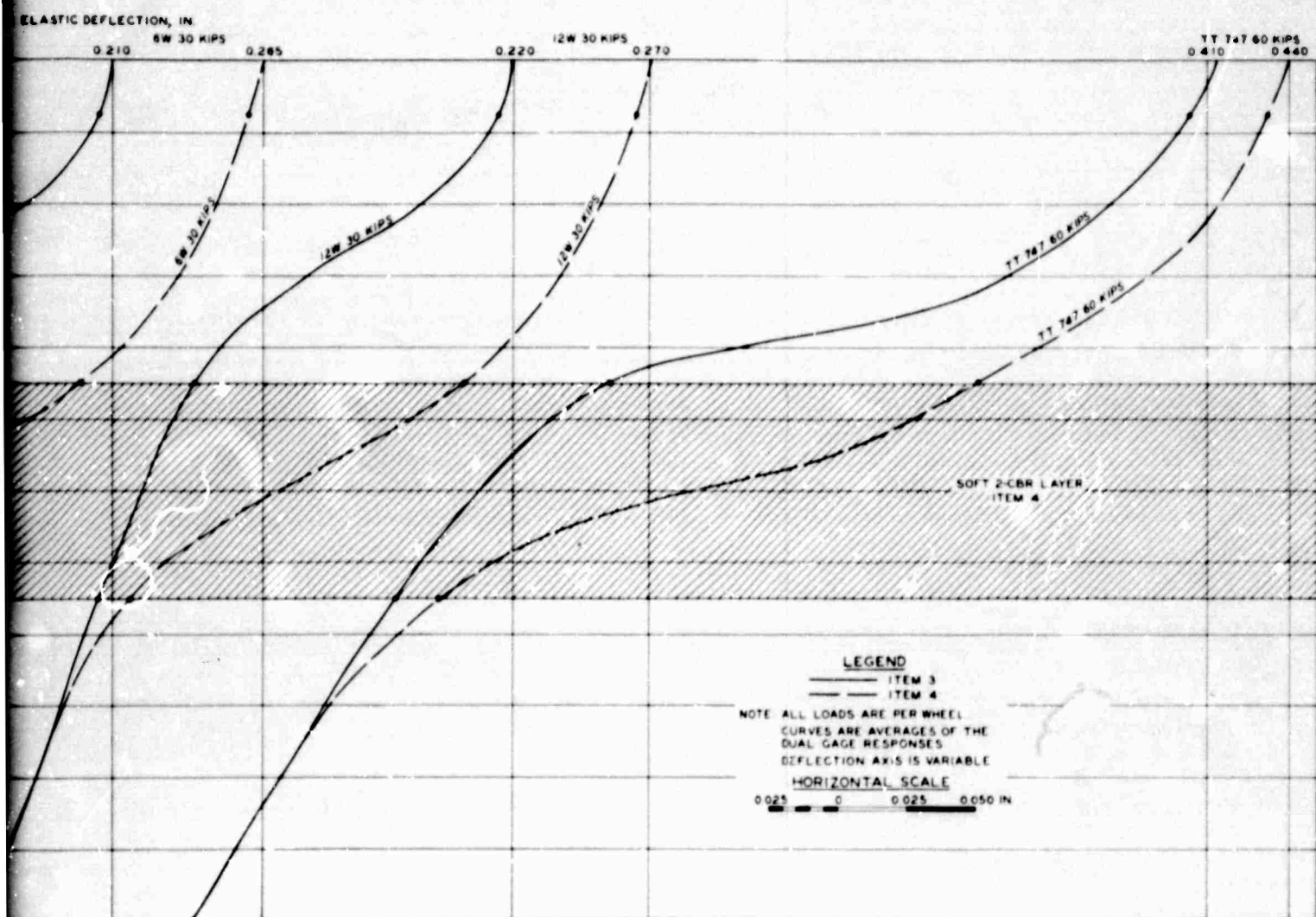
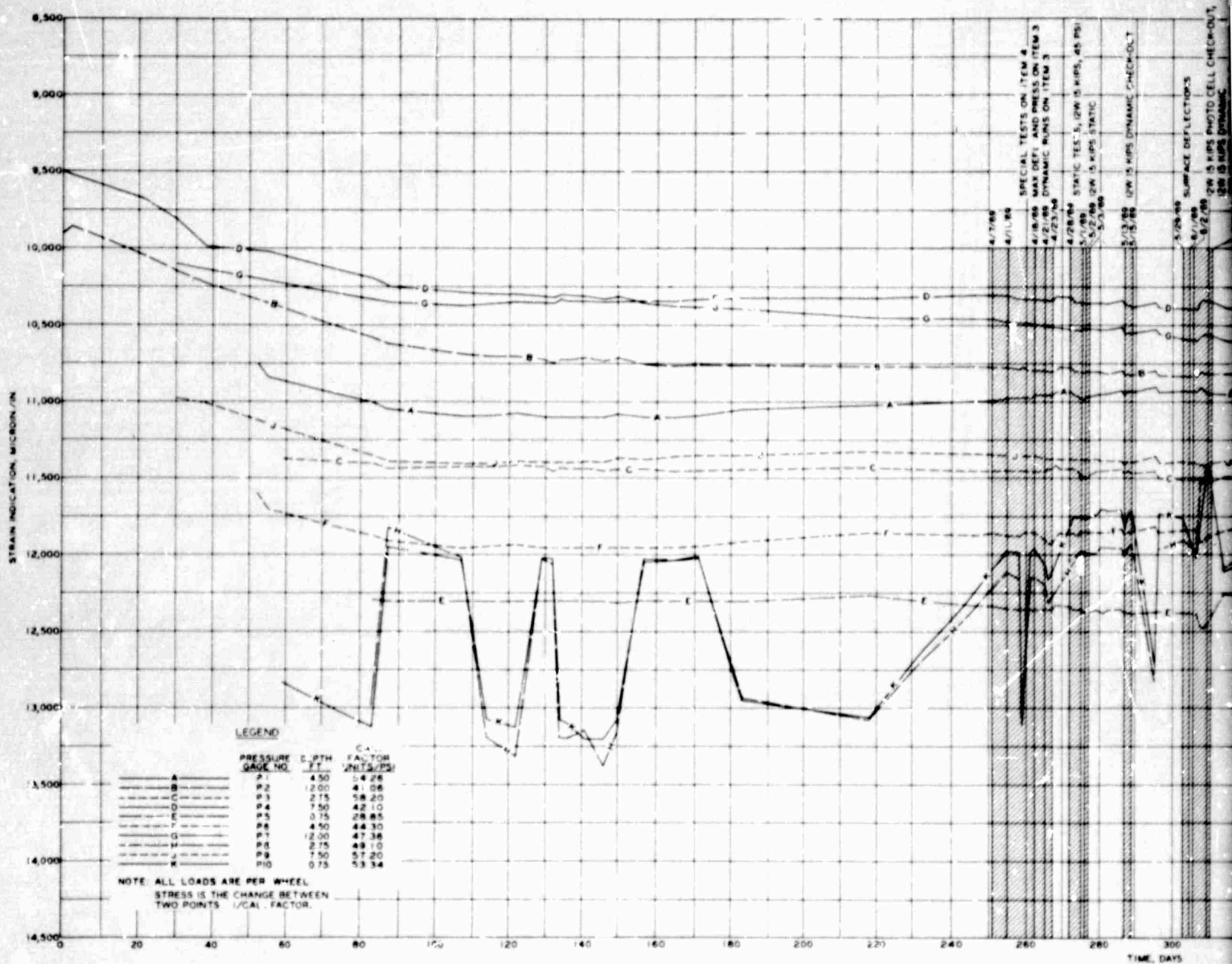
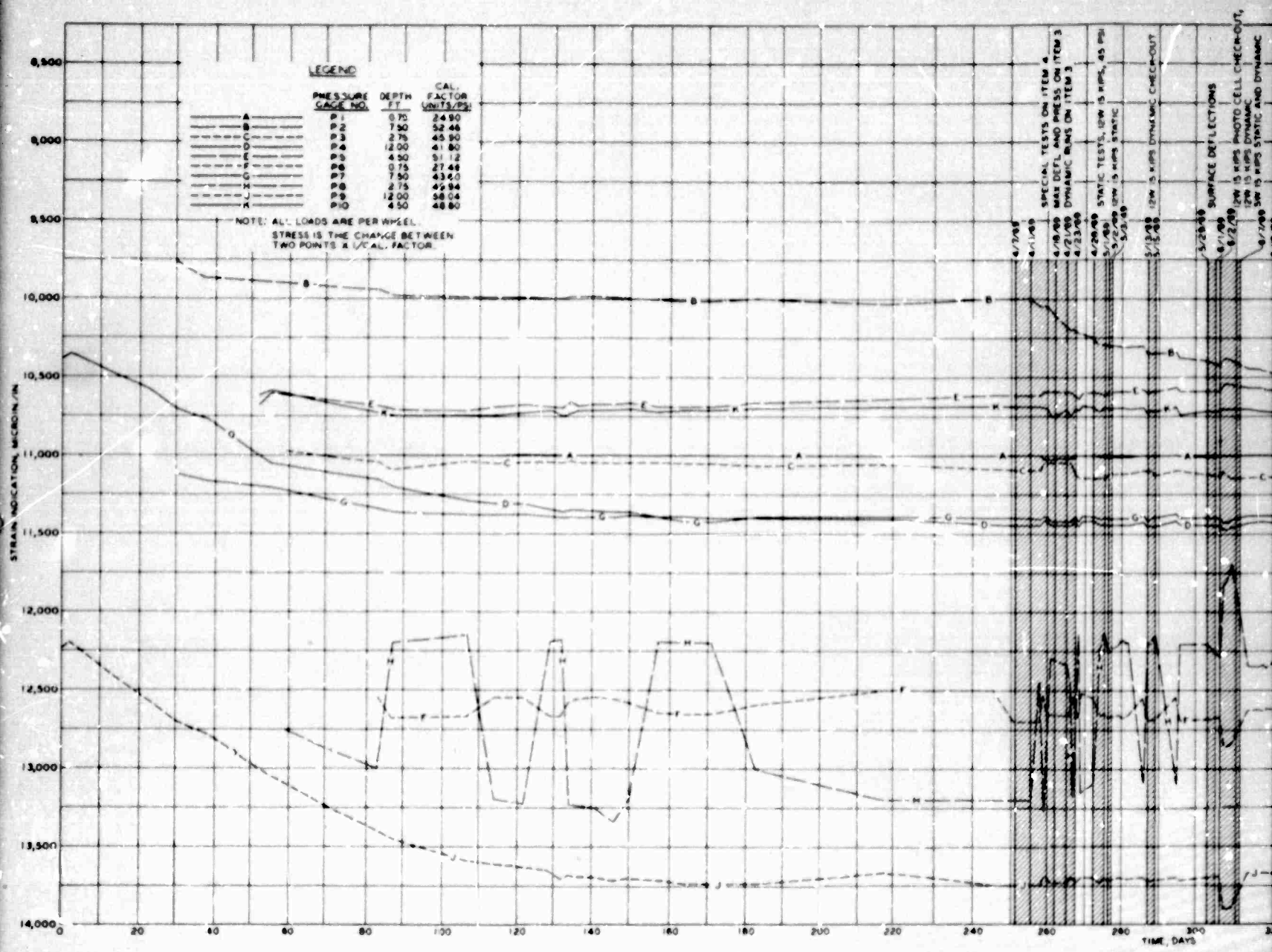
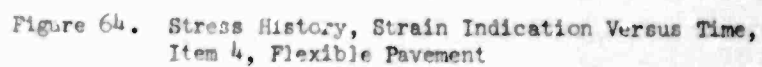
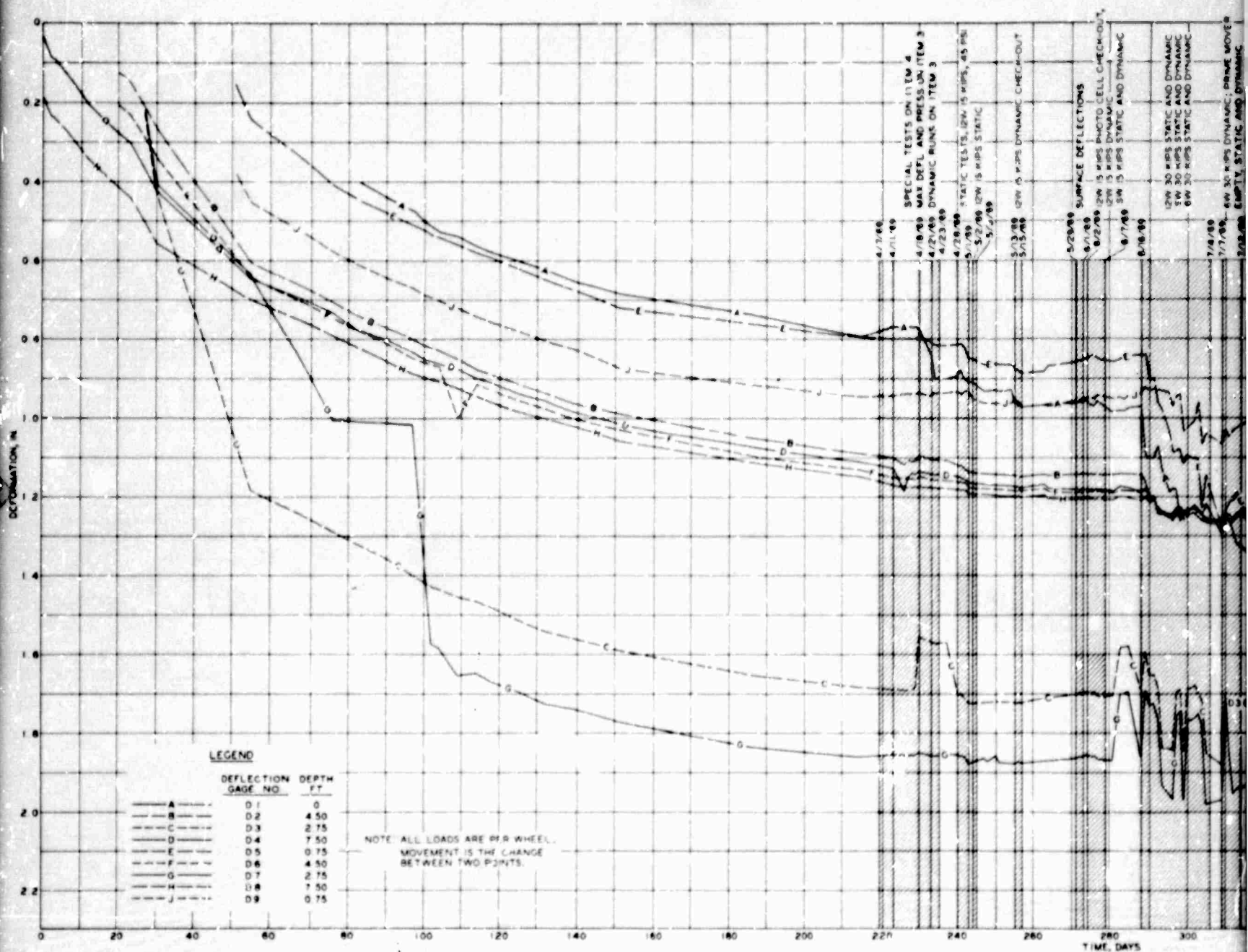


Figure 24. Item 3 Versus Item 4 Limiting Deflection Curves, Static Load Flexible Pavement Tests









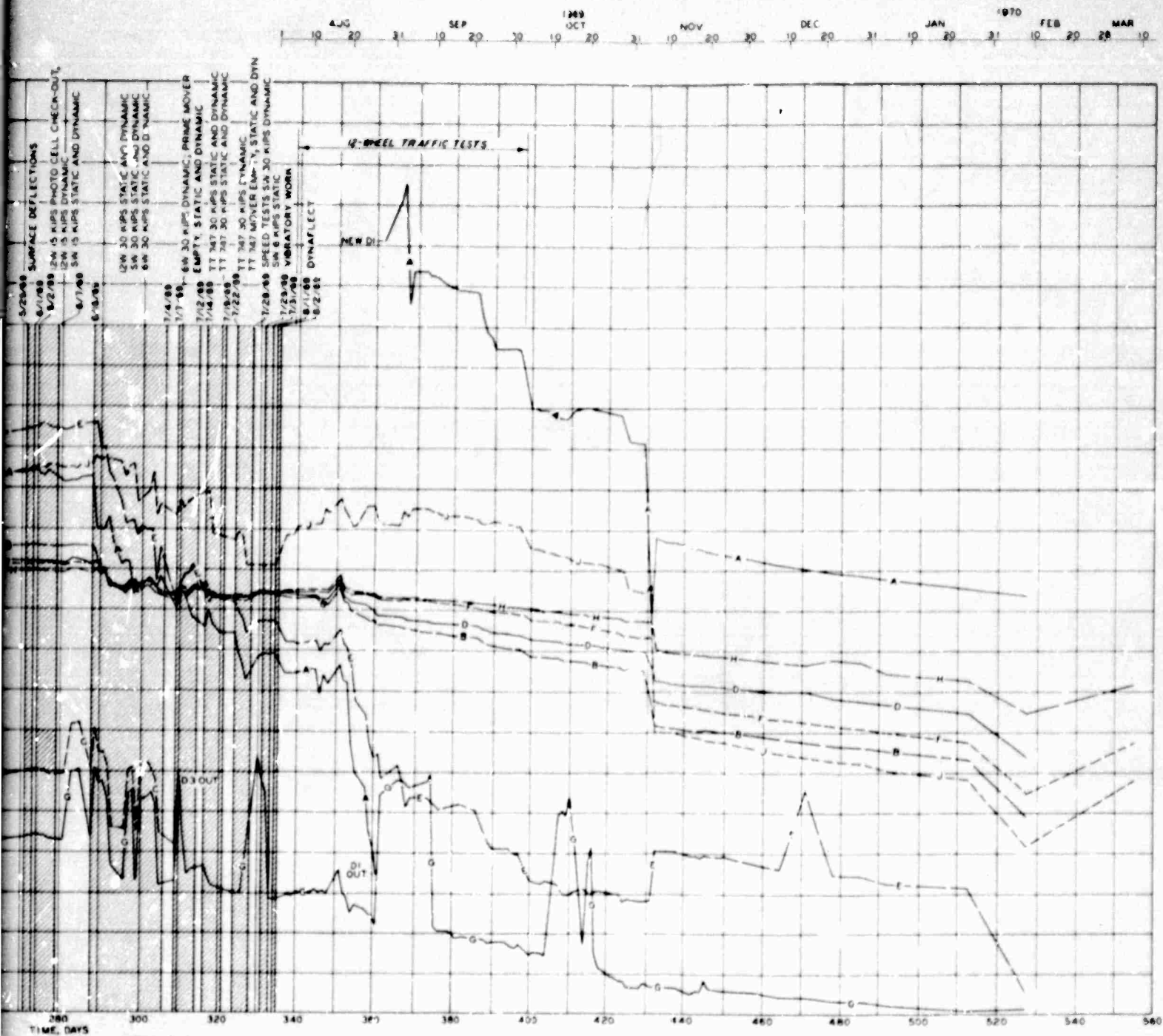
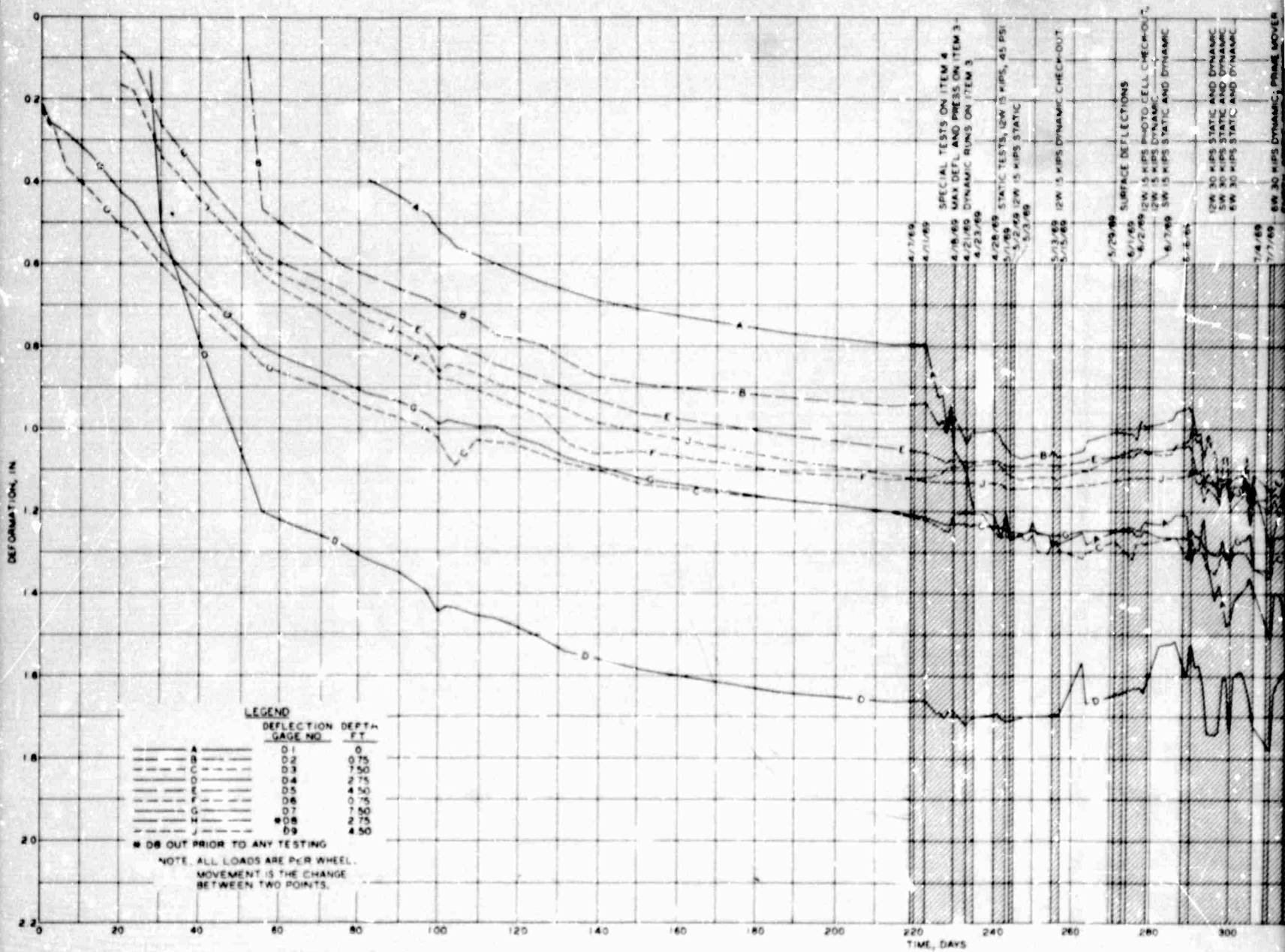


Figure 67. Deformation History, Deformation Versus Time, Item 3, Flexible Pavement



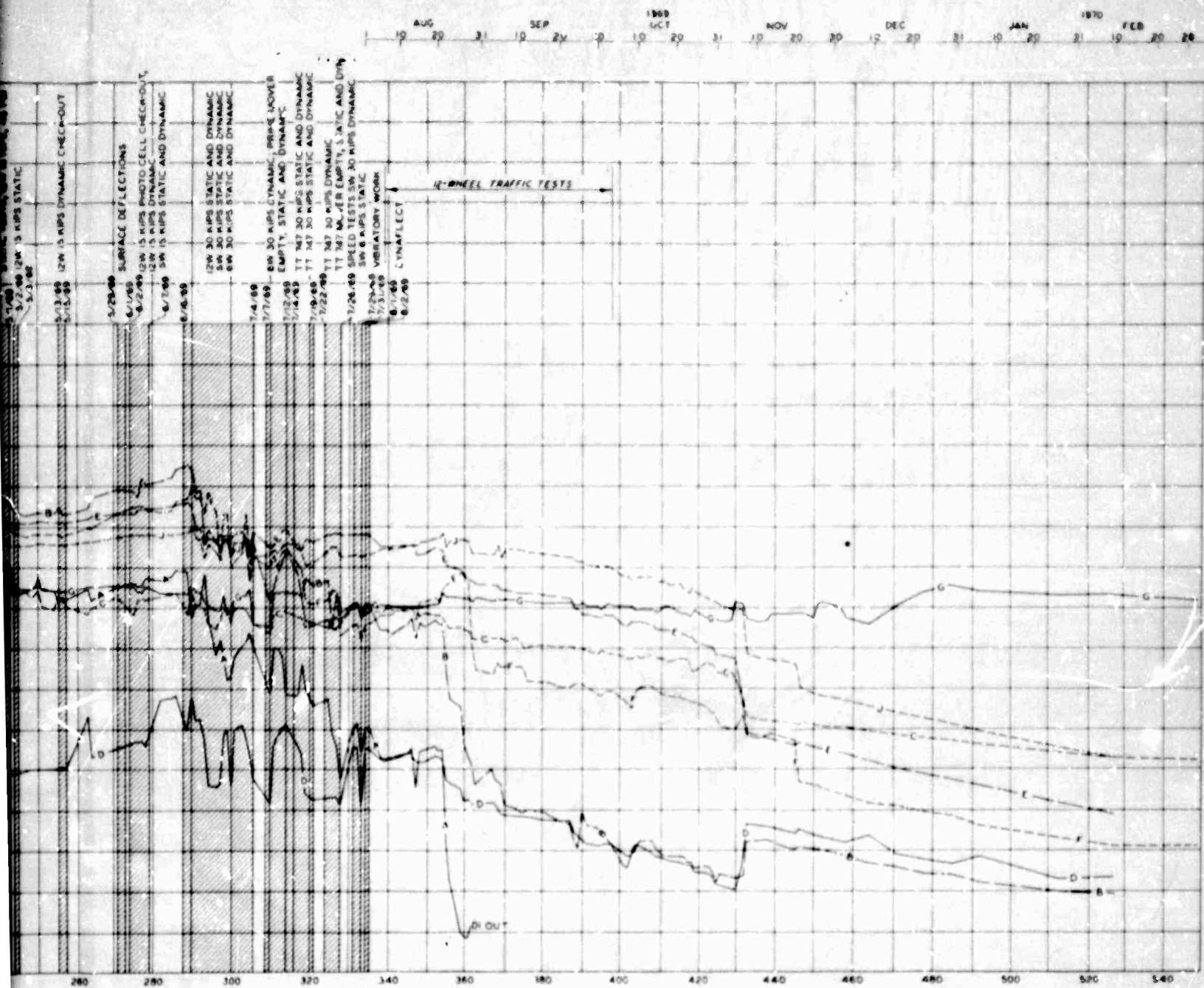


Figure 68. Deformation History, Deformation Versus Time Item 4, Flexible Pavement

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